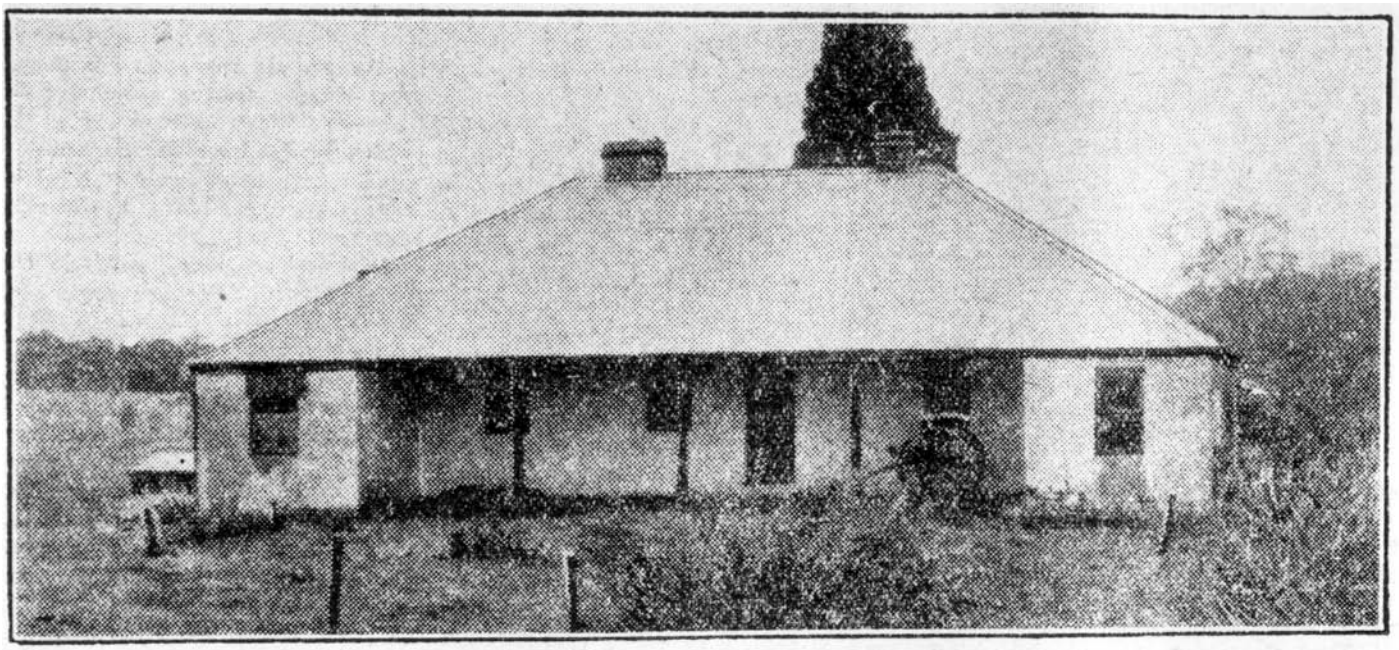
# MAJOR NEWMAN'S PONTVILLE: FABRIC ANALYSIS AND ARCHAEOLOGICAL INVESTIGATION OF AN EARLY COLONIAL HOME-STEAD, TEMPLESTOWE, VICTORIA *WITH* A COMPARATIVE STUDY OF SWEENEY'S CULLA HILL, ELTHAM



PONTVILLE, MAJOR NEWMAN'S FIRST HOMESTEAD AT DEEP CREEK.

**A report to Parks Victoria**
June 2014

# MAJOR NEWMAN'S PONTVILLE: FABRIC ANALYSIS AND ARCHAEOLOGICAL INVESTIGATION OF AN EARLY COLONIAL HOME-STEAD, TEMPLESTOWE, VICTORIA *WITH* A COMPARATIVE STUDY OF SWEENEY'S CULLA HILL, ELTHAM

Roger Luebbers PhD
Consultant Archaeologist
August 1997
Revised June 2014

**Cover: Pontville as depicted in August 1933 from *The Age* newspaper courtesy La Trobe Collection SLV Melbourne**
**Title page: Pontville 2014**

## TABLE OF CONTESTS

## Preface

This report was prepared for Parks Victoria to provide guidance for managing construction impacts to the Pontville homestead and kitchen in 1997. That advice was conveyed verbally in late 1997 in time to guide a stabilization program that was urgently needed for the kitchen building and home precinct area. The scale of the project increased greatly when it became clear that the archaeological assessment could not satisfactorily identify critical relationships without additional input from a fabric analysis of the homestead. In particular, the historic significance of nails and roofing materials encountered by excavation could not be satisfactorily explored without additional dating research. The written report was largely completed by the end of 1997 with these shortcomings. The opportunity to inspect and assess historically contemporaneous fabric at Culla Hill shifted the focus away from Pontville and greatly increased the timeframe for completion. A closer study of the artefact collection obtained from Pontville, especially the nail assemblage, was undertaken in the intervening years and new questions about fabric relationships in the homestead were pursued during a site visit in February 2013 to update or test preliminary conclusions from a decade and half earlier.

The draft report of 1997 has now been revised and bears the current date and includes an expanded discussion of the nails and archaeological interpretations of the field tests conducted nearly two decades ago. In addition, access to Newman and Sweeney family histories from descendants and relevant websites were incorporated in the update to comment on colonial land use strategies that operated in the Mid-Yarra River valley in the 1840s. Additional historic documentation from contemporary witnesses pertaining to the construction of the Pontville homestead and peer comment are also included in this updated version of the report.

## Executive Summary

The archaeological investigation reported here was commissioned by **Parks Victoria** to guide an emergency rehabilitation program to ensure that the earliest elements of Newman's Pontville Station were safeguarded following a spate of vandalism and weather conditions that threatened a detached timber kitchen. Located in the Melbourne suburb of Templestowe at the confluence of Mullum Mullum Creek and the Yarra River, Pontville was built by Major Charles Newman (1783-1865) between 1843-1844 after the family squatted on the property from March 1838. Now owned by Parks Victoria, the derelict homestead is considered a rare and possibly the oldest surviving example of an Indian bungalow house form in the Mid-Yarra River Valley. A conservation plan has recommended a series of measures to ensure the future safeguard of this important element in the inventory of the State's heritage.

The research is based on a physical inspection of *in situ* fabric and demolition refuse, historical photographs, archaeological data, and eye-witness testimony relating to the homestead prior to major renovation in early 1950. A specific aim of the excavation is to identify the extent of the extant kitchen and the possibility that the remains of an earlier kitchen are preserved beneath it. To assist the assessment, the extent of surviving early fabric at the homestead itself was also investigated. The field work was carried out between March and November, 1997, and the final report expanded between October 2013 and April 2014 to incorporate additional information.

The results demonstrates for the first time that, despite extensive renovation and a sequence of demolition, significant architectural and finishing details of the 1840s construction are faithfully preserved in the confines of the homestead. The house at the time of construction consisted of a central core of brick walls encompassing three main rooms which rose to the roof to form a central loft, three fireplaces, and two long end rooms which were separated by front and rear verandahs under a single pitched roof. The fabric analysis shows that the end rooms were integral to the original design of the homestead and the study has document a full range of assembly nails used in the construction and subsequent renovations. The major discoveries made are the following:

PONTVILLE HOMESTEAD

- The 1930s house form and internal layout expressing the distinctive Indian Bungalow style is unchanged from its original design of the early-1840s. The floor space at the time of occupancy amounted to 240 square meters. A scaled drawing proposes the original house layout as supported by evidence discussed here.
- The house was first clad in split timber shingles and then by slates, the change possibly occurring at the same time Newman built Monckton on an adjoining property in 1853-55 which also had a slate roof. A corrugated iron roof and pine ceilings were installed in 1910-20 after the farm changed ownership. Samples of each roofing element are recorded here.
- The original ceiling joists, window and door frames, and rafters were fashioned from pit-sawn timber. Examples of these survive in the building today and are recorded here.
- The sequence of the original wall decorations, including an initial blue and pink lime washes followed by two wall paper print patterns believed to belong to the Newman residency have been recovered.
- Three original sandstone hearths remain intact in the house ca. 120 mm below a timber floor installed after 1950. These indicate the original floor height for the homestead of 2.84 m and that the most recent one is raised uniformly throughout the core rooms.
- The external door openings included transom lights and survive intact beneath modern framework.
- Several types of quality hand-made and early machine-made 19$^{th}$ century nails were used to assemble the roof, the lath and plaster ceilings in the house and to finish window surrounds. It is proposed here that shingles were fixed with an early machine-assisted pre-profiled square neck nail or zinc alloy clouts, and a square shank wrought nail was used on main roofing timber, and the Ewbank machine pressed nail was introduced in a replacement slate roof in 1855-57. A zinc alloy roofing clout was used to fix the slates and a corrugated iron roof was installed in the early 20th century with wire clouts with lead heads.

These are described and illustrated. The diversity in nail manufacture observed at Pontville most likely reflects competitive pressures experienced in British nail production that resulted in different technologies producing similar nail types.

DETACHED KITCHENS and LAYOUT

- The extant detached kitchen of two rooms was constructed with late 19th century nails and roofing iron after 1882 when bricks in its chimney made by the Hoffman kiln first came on to the Victorian market. Analysis presented here suggests it was erected during a period of economic boom of the 1880s by Major Newman's son Charles Newman Newman.
- Archaeological evidence concludes that the extant kitchen was most probably not built over the site of an existing detached kitchen and accordingly represented a departure from the use of the existing home precinct.
- Possible locations of the original detached kitchen are proposed.
- The remains of two previously unknown 19th century structures and an underground rainwater tank are identified.

Archaeological excavation of the Pontville detached kitchen, adjacent pathway and areas of the back yard of the homestead and the sub-floor area of the main rooms are described. Investigations on the detached kitchen failed to locate significant fabric that could be adversely impacted by the proposed rehabilitation works. Accordingly this report finds that the conservation and rehabilitation program can proceed without further heritage impacts.

CONCLUSIONS OF EXCAVATION

An analysis suggests that the following areas of the homestead and residential compound remain archaeologically sensitive.

- The sub-floor deposits of each main room include construction artefacts and plaster on which the original wall decorations are vividly preserved. The entire sub-floor area beneath the raised timber floor of the recent interior kitchen and bathroom may contain an old and possibly early cement floor, intact sub-floor brickwork to an interior end wall, and possible early artefacts of considerable significance to both the habitation and construction history of the house.
- The back yard in the compound contains the only known household refuse belonging to the 19th century, a brick base to a water tank, and a brick foundation system of unknown function, and a filled underground rainwater tank used by the 19th century household. No specific discard centre containing household refuse was uncovered by this study.
- A stone ruin and retaining walls 55 m to the north of the house are believed to represent an original building belonging to the colonial Pontville station and should be investigated to confirm this.
- The south garden is believed to date to the 19th century and should be further investigated by archaeological techniques to identify its form and potential artefact content.

The archaeological investigation failed to locate any evidence of a structure beneath the extant kitchen which could have been an early building such as a kitchen. All fabric excavated beneath the kitchen floor is poorly preserved demolition material that is not considered significant in the future preservation of the site. Therefore, provided due care is taken, the proposed site stabilisation works and sub-floor ventilation program proposed for the kitchen and homestead at Pontville are unlikely to create disturbances to fabric of the site belonging to the Newman period of habitation.

ABORIGINAL OCCUPATION

- Stone artefacts found on the grounds and embedded in building fabric during the original build indicate that the home precinct of Pontville was built on a former Aboriginal camp site. Archaeological analysis suggests a probable 19th century occupation of this camp prior to the Newman settlement.

CULLA HILL HOMESTEAD

Built by Thomas Sweeney (1803-1867) in the mid-19th century, Culla Hill is located directly opposite Pontville on the northern side of the Yarra River in Eltham when the property was placed on the

market for auction. It also has a central masonry core of hand-made bricks which rises to the roof, pit sawn timber elements, a front verandah between two opposing end rooms, a side and main loft which were used for living quarters, and a single high pitched roof. The sequence of renovations is described, first as the house appears today, in 1940 at the time of professional alteration, and at the time of construction. An analysis of accessible fabric, a late 19th and various 20th century images, and eye-witness testimony concluded that:

- The original ceiling joists, window and door frames and timber roof elements were fashioned from pit-sawn timber, most of which survive unaltered in the building.
- Lath and plaster ceilings in the front verandah, in the central room, and above a new ceiling in the study are probably mid-19th century. Early wall decorations may be preserved *in situ* in the house.
- The original roof was constructed with slates and, although now covered in cement tiles, its original profile survives intact.
- A central and a side loft were accessed through a single entrance in a back room. *In situ* wall paper and an underlying blue lime wash over plaster in the side loft suggest that it was inhabited in the early history of the house.
- An oversize fireplace, or inglenook, was the main heat source for the house, possibly incorporating as many as 3 fireboxes in separate rooms.
- The nail assemblage for the roof and loft timber contains Ewbank nails in the roof, loft and main floors, and a single type of zinc alloy roofing clout.

## SUMMARY RECOMMENDATIONS

This report makes the following recommendations for Pontville:

1) Within the Security Fence;-

   a) No works involving ground disturbances should be allowed to take place without first being assessed by a qualified archaeologist. This assessment work should be considered an archaeological investigation in its own right and not simply a monitoring exercise.

   b) Works involving ground disturbance to the raised floor and renovated portion of the rear of the homestead should only be undertaken with the supervision of a qualified archaeologist in order to fully examine and assess all residues and deposits beneath the floor.

   c) Future archaeological investigation should attempt to discover the significance of several features in the precinct. These are:

- The line of hand-made bricks near the south garden,
- The underground rainwater tank between the house and the Cypress tree,
- The 19th century brick foundations in the south-west corner of the house, as shown in the Site Plan, Figure 2,
- The artefacts and associated building fabric in the south-west corner of the house,
- The residues, architectural fabric, and deposits beneath the raised timber floor under the rear verandah of the homestead.
- The residues, architectural fabric, and deposits beneath the extant floor in each of the three core rooms of the homestead.
- A materials conservation program should be developed and funded for all artefacts and other fabric retained for future reference.

2) Outside the Security Fence:-

   a) The significance of the stone ruins and retaining walls 55m north of the house should be investigated by archaeological excavation to determine its extent and function. No development or ground disturbances should be allowed to take place within a 20 m buffer of these ruins and stone rubble without first undertaking this work.

   b) The old mulberry tree near the Yarra River should be preserved as far as possible and should not be removed while it is alive.

c) The location of the late 1830s huts erected by Newman should be determined and recorded, with consideration being directed to the banks of the Yarra River in allotments 1 & 2 west of Mullum Mullum Creek.

3) Laboratory

a) The species of all timber building elements in the sample inventory should be identified to establish likely market sources. This should include the original front door frame and the ceiling joists.

b) All nails in the reference collection have been cleaned either by acid or electrolysis for photographic documentation and should be professionally conserved.

c) The identification and origins of the sandstone hearths in the homestead should be determined.

## ACKNOWLEDGMENTS

The author gratefully acknowledges the inputs of many heritage conscious people in completing this study. With a long standing involvement in heritage studies in the mid-Yarra River, Isabel Ellender gave historical and cultural insight for the development of this study, as did Chris Johnston, from Context Pty Ltd. From Parks Victoria, Laurie Halikari briefed the project, provided equipment and enthusiastically supported the work from the onset. Brian Patterson, cultural officer met at Pontville with the author and provided valuable advice for the protection of Aboriginal cultural materials. Generous and informative technical advice was given by Mrs. Phyllis Murphy, Prof. Miles Lewis, Mr. Richard Peterson, Mr. Hanut Dodd, and Mr. Peter Cuffley. Professor Lewis and Mr Chris How collaborated closely in nail discussions and identification. The on-site assistance and information provided by Hamish Knox and staff at Knox Construction is gratefully acknowledged. So too is the assistance of the librarians from the La Trobe Collection of the State Library of Victoria, the State Library of New South Wales, and the Friends of Pontville, the latter who skilfully provided voluntary labour. A special thank you goes to the late Mr Irvine Green for both his personal observations and for the passion he held that gave others the inspiration to continue. Mrs. Violet and Mr Michael Burston of Culla Hill generously allowed access to their family home and provided photographs and documents pertaining to their period of residency beginning in 1950. A very special thanks goes to Dr. Peter Davies as the principal archaeologist on the project, and to volunteer archaeologists MsTaryn Debney and Ms Vicky Clayton. Thanks to Ms Vicky Nicholson Wurundjeri representative and to the late Mr Brian Patterson from the Healesville Coranderrk Aboriginal Cooperative for advice on Aboriginal matters. A birthday party for Master Dylan Ellender Villotti provided the chance meeting with Mr Graham McDonald, who as a distant relative of Major Newnan offered insight into family views and history. Mr Richard Peterson, conservation architect, was project supervisor for the City of Manningham. A big thank you goes to Peter Cuffley whose infectious enthusiasm provided much appreciated direction and a great deal of Sweeney family history he has been researching over the last 30 years. A big thank you goes to John Rush, Ranger, Warrandyte Parks Office, and Chris Smith Heritage Planner, Parks Victoria. Margaret Harman Tasmanian heritage office, and librarians of the NSW Library, Mitchell Library conducted personal searches for this project. Ms Willys Keeble, heritage advisor for Manningham City Council, commented on aspects of this report. Thanks too for sharing personal journeys to record family history of the Newman settlement by Mr Carl B. Newman Webster, Mr Jim Poulter, and Ms Lyn Long.

# 1 PROJECT BACKGROUND

Pontville is located at the upper edge of the flood plain, Figure 1, of the Yarra River in Templestowe in Manningham City Council. The physical remains of the occupation in the home precinct are a derelict carcass of the main house, a two roomed detached kitchen, the remnants of a 20th century dairy, an underground brick water tank, vehicular tracks, and plantings which have been associated with the farm at various times since the mid-1840s. At an unknown location on the adjacent banks of the Yarra River is the site of the first Newman habitation when the family lived in turf huts on the property.

This report is limited in scope to an assessment of the physical fabric which survives in the home precinct at Pontville and which may relate to its construction and subsequent use by Major Charles Newman and his direct descendants. To the extent that is possible, biographic information is used to propose a chronology for interpreting the significance of the fabric being investigated.

The aim of this study is twofold. First to provide definitive documentation of the fabric of an early colonial building in Victoria for future reference; second to identify fabric belonging to the Newman tenure so that the conservation plan can be implemented with confidence. This approach enables future archaeological assessment guidance with a technical description of the fabric that is most likely to survive at the site.

## 1.1 Report Distribution

The Pontville report is being distributed according to statutory and contractual requirements to both the client and the state agencies who administer the relevant acts under which this research was carried out. In addition many individuals and organisations have generously assisted in the works program at the site, or have given expert opinion in conducting various assessments on particular fabric collected as a result of the work, or are otherwise custodians of the Pontville legacy. In recognition of each of these special relationships to the site, this report is distributed to the following:-

- Parks Victoria
- Office of Aboriginal Affairs Victoria
- Heritage Victoria
- Manningham City Council
- National Trust of Victoria
- La Trobe Collection, State Library of Victory
- Chairperson, Wurundjeri Council
- Friends of Pontville, Templestowe
- Prof. Miles Lewis
- Mr Christopher How

## 1.2 Site Registration and Management Status

Pontville is located in the Melbourne suburb of Templestowe in Manningham City Council (MCC) and is currently managed by Parks Victoria . It is listed in the inventory of archaeological sites in the State of Victoria by the number H7922-122 and is registered by the Heritage Council under the *Heritage Act* (Vic),1998, by the number (VHR)H1395 and is considered of state significance on the basis of its social history, architectural influence, and physical (archaeological) fabric. Prior to this study, a portion of the Pontville precinct was registered under the *Aboriginal and Torres Strait Islander Heritage Protection Act* 1984, as an Aboriginal Place, VAHR 7922-539, with the discovery in 1996 of seven Aboriginal artefacts in three augur holes drilled to construct the security fence creating the precinct (Luebbers 1996). Additional artefact discoveries reported here employ this registration number.

## 1.3 Legislative Protection

Both State and Commonwealth legislation in Victoria currently provide for the protection of all heritage materials whether or not they are listed or otherwise registered. Currently, the Department of Premier and Cabinet Office of Aboriginal Affairs Victoria (OAAV) administers these Acts. With the exception of human remains interred after the year 1834, the *Aboriginal and Torres Strait Islander Heritage Protection Act* 1984 provides blanket protection for all material relating to past Aboriginal

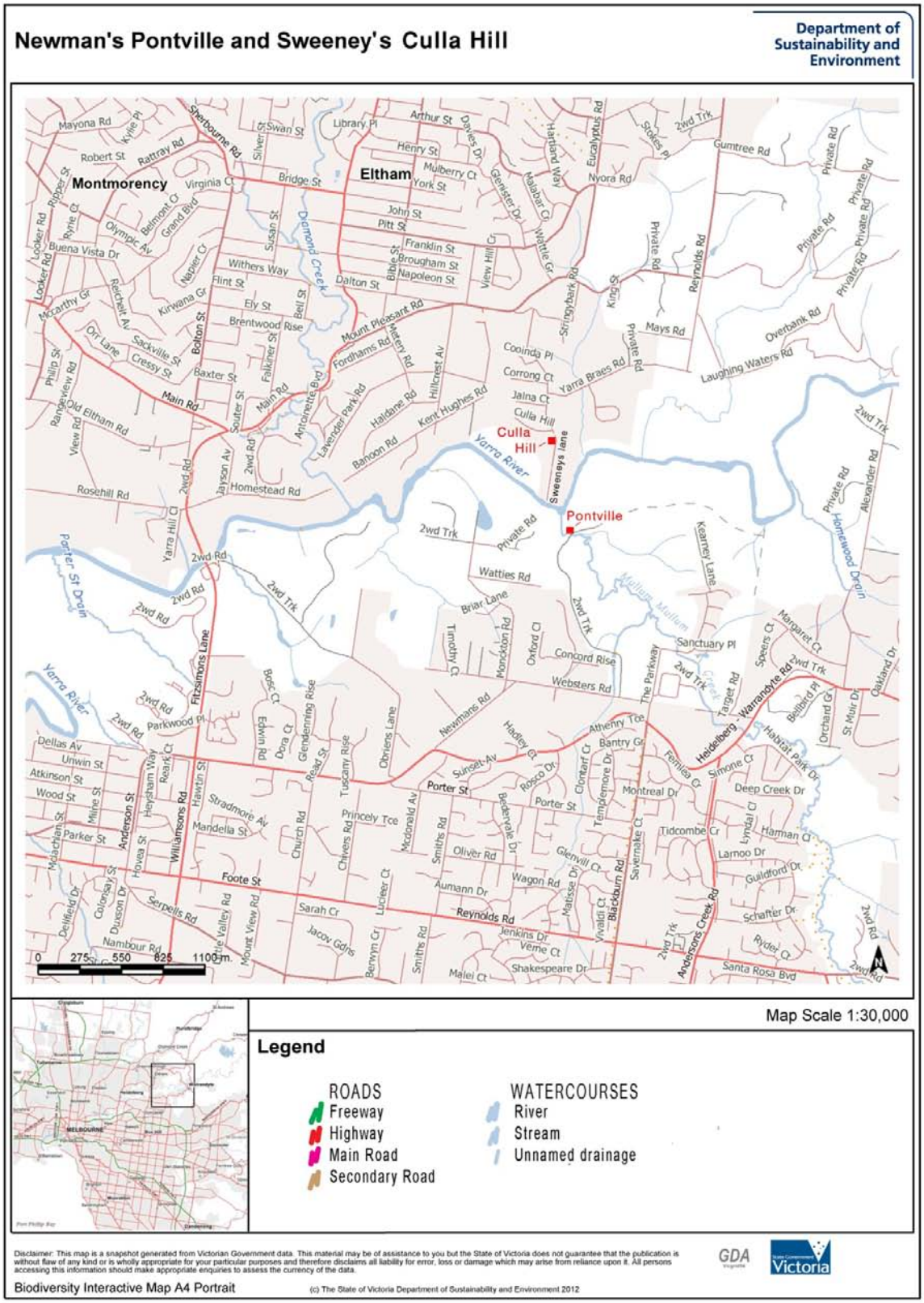



***Figure 1*** *Locality plan, Pontville in Templestowe and Culla Hill Eltham, the mid-Yarra River Valley.*

of Victoria, both before and after European occupation. At the time works were carried out in this project, the *Aboriginal and Torres Strait Islander Heritage Protection Act* 1984 was in force. This Act prohibited anyone from defacing, damaging, interfering with or endangering an Aboriginal place unless the prior consent of the local Aboriginal community has been obtained in writing. Consents to carry out the work described here are presented in Appendices 2 & 3.

The Regulations to the Act (Regulation 3A, Schedule 4) lists the Coranderrk Koori Co-operative as the custodian of the Aboriginal cultural heritage at Pontville. Mr. Brian Patterson is the cultural officer for the Co-operative and he and various other selected community members are frequently involved in both site inspections and in the assessment process that is conducted under the current Acts.

All historical archaeological sites in Victoria (including those not listed on the Heritage Register) are protected under Section 127 of the *Heritage Act* 1995, which is administered by Heritage Victoria (HV) in the Department of Planning and Community Development. It is an offence to excavate, damage, or disturb relics and sites whether they are included on the Heritage Inventory or not, without a consent issued under Section 129 of the Act. Under Section 64 of the Act, it is an offence to damage, disturb, excavate or alter a place or object on the Heritage Register, unless a permit is granted under Section 67. Under Section 132, any person discovering an archaeological relic is required to report it to the Executive Director of the Heritage Council.

At the commencement of this investigation in 1997, the then Aboriginal Affairs Victoria issued a Consent to Disturb Aboriginal Relics in pursuant to the requirements of the Archaeological and Aboriginal Relics Preservation Act 1972, Appendix 2, supported by consent from Coranderrk Koori Co-operative, Appendix 1. Heritage Victoria issued Consent Number CE 97-6 to Parks Victoria pursuant to Section 129 of the Act subject to conditions to enable the supervising archaeologist to conduct this work, Appendix 3.

### 1.4 Complying with Protocols

The author in 1997 submitted applications to AAV and HV for consent to carry out the proposed excavations at Pontville, in compliance with the requirements of the respective heritage protection Acts applying at the time in Victoria, see Appendices 2 &3. In accordance with protocol, arrangements were made with Mr Brian Patterson, cultural officer from the Coranderrk Koori Co-operative for consent to conduct the field investigation, Appendix 1. Mr Patterson provided a written consent from the Co-operative agreeing to the proposal to excavate a site with known Aboriginal materials present. He also arranged with the consultant to report the discovery of any Aboriginal materials to him so that he could attend and assess the significance of the discovery. Brian attended a site inspection with the consultant for an up-to-date briefing when additional Aboriginal materials were uncovered.

### 1.5 Archaeological Assessment

The archaeological assessments for historical, non-Aboriginal fabric provided in this report are based on consideration of several lines of evidence. The process involves close detailed inspection of the fabric itself, a review of the relevant literature, and, where appropriate, by laboratory analysis. A similar approach has been adopted in the evaluation of Aboriginal cultural materials, although a heavier reliance has been placed on scientific research in the later.

The conclusion that an archaeological deposit is significant follows set comparisons with known archaeological materials in the area, or in similar environmental settings researched within the region. In this report the state of preservation is a key issue underlying an assessment of significance, the more intact or undisturbed a deposit is found to be, the greater will be its potential for future research. Conversely, a site which has lost its stratigraphic context and is dispersed across an eroding surface is likely to have lost its archaeological significance.

The research undertaken here has been based on small excavations and involves small fragments or typically tiny fractions of the whole fabric. The limitations imposed on the assessment are therefore naturally those associated with the impacts of demolition, burial, decay, and poor exposure.

Under no circumstances should the assessments given in this report be understood to necessarily represent the significance of a particular archaeological deposit as viewed by an Aboriginal custodian. Although Aboriginal views were explicitly solicited at the time heritage materials were discovered in this assessment, those views were not obtained nor do not automatically coincide with those of the archaeological assessment.

# 2 Summary of Historical Events

## 2.1 Newman Settlement Events at Pontville

The Newman association with the Yarra River in Templestowe has been described by several writers, notably Poulter[1], Crockett *et al*[2], Green[3] and McBriar[4] over the last few decades. More recently the significance of the Pontville home precinct has been addressed in the Conservation Policy report[5] which draws together all relevant historical and heritage assessment for the property. That assessment was aided first by a report issued by the Victoria Archaeology Survey (Snelgrove & Trumble 1993) and by specialist consultants reports compiled by Context Pty Ltd (Kellaway 1994) and Professor Lewis (1994). Much of the historical background in those resource documents has been consulted for this study. A monitoring of the installation of a security fence[6] and archaeological survey of Tikalara Park[7] for Parks Victoria identified Aboriginal heritage and a potential sand quarry used by Newman on the former Pontville property. An additional limited search by the author at the Mitchell Library in 1997 located more definitive historical accounts of the Newman residency on the property. A reference to the farm by G. A. Robinson in 1840 and a petition signed by Newman in 1844 to oust Superintendent Latrobe from office are the only significant new contributions to the story of the Newman settlement and those references appear here. As a backdrop to the fabric analysis undertaken in this report, a chronology of events involving Pontville from these sources is given below, including more recently compiled genealogy information[8].

Major Charles Newman (1783-1865) retired from the 51st Regiment Bengal Native Infantry of the Honourable East India Company in September 1834 as an invalid and settled initially in Tasmania[9] with his new wife Catherine (nee Otto:1801-1865), their two young children, and two daughters from her first marriage to Josiah Reader. By early 1835, the family was housed in the garrison village of Pontville and farmed a small property at Black Brush on the banks of the Jordan River. On 22 January1838 Newman applied[10] to acquire land in Port Phillip under a remission scheme available to retired military officers, but was deemed[11] ineligible by Governor Gipps. Nevertheless, he travelled to Melbourne in search of a place to finally settle and raise a family. A survey map[12] by Nutt dated 1839 and another compiled by Hoddle[13] on 19 August 1841 note the location of "Mr Newman's Sheep Station" west of Deep Creek (now known as Mullum Mullum Creek). Land title documents for this location indicate that Newman purchased Portions 3 and 4 in April 1844, Portion 1 in 1845, and Portion 2 in 1849, all in allotment 17, Parish of Bulleen County of Burke in the future township of Templestowe, Figure 2a & b. These were the earliest recorded holdings obtained in Victoria by the family but the Pontville placename itself does not appear in any survey maps compiled during Newman's lifetime. This habitation was called Yarra Yarra Run and was located on the south side of the Yarra River at the confluence of the Mullum Mullum Creek . It is clear from his own words that Newman was squatting on the Yarra River since March 1838 and had erected fencing and cleared land to demonstrate his intentions to eventually gain title from this time onward.

These four allotments amounted to ca 550 acres over which Newman grazed cattle and sheep, breed horses, and trained prized race horses. In July 1840, he obtained a pastoral lease over the adjoining land reported to be 4400 acres in size stretching eastward to Anderson Creek at Warrandyte[14]. Initially living with his family in a turf hut, he began purchasing his land in several parcels during the mid-1840s. Neighbours at this time included James Anderson, immediately to the east, James Dawson, George and Penelope Selby, John Gardiner, Major St. John, and J. H. Kerr. The purchase of 110 acres of land directly opposite to the north of Pontville in Eltham by Thomas Sweeney (1803-1867) in

[1] Poulter, Hazel, 1984
[2] David Crockett, Cheryl Crockett and Hazel Poulter, no date, typescript received from Jim Poulter.
[3] Green, 1982
[4] McBriar, 1985
[5] Context and Nigel Lewis and Associates, 1995.
[6] Luebbers, 1998
[7] Luebbers, 1999
[8] http://freepages.genealogy.rootsweb.ancestry.com/~hanhorg/bio/newman/newman_charles_0995-01.html
[9] The Newmans arrived in Hobart aboard the *Princess Victoria* on 6 November 1834, Passenger list, *Hobart Town Courier*, 7 November 1834.
[10] Governor Gipps cited this date in his dispatch to Lord Stanley stating the application was signed in VDL.
[11] Newman appealed the decision over several years, the issue being raised with the Queen by Lord Stanley, Government Dispatches, A1234, CY670, letter written 15 June 1844, State Library of NSW.
[12] Part of Yarra River, Nutt series, PROV VPRS 8168/P1 Unit 2717, LODDON 25.
[13] PROV VPRS 8168 P0005, Sydney B25 Bulleen, survey date August 1841, Mr Surveyor Hoddle.
[14] Billis and Kenyon, *Pastoral Pioneers of Port Phillip, p. 266. Spreadborough and Anderson, p 265, calculate Newman's run as 6183 acres*.

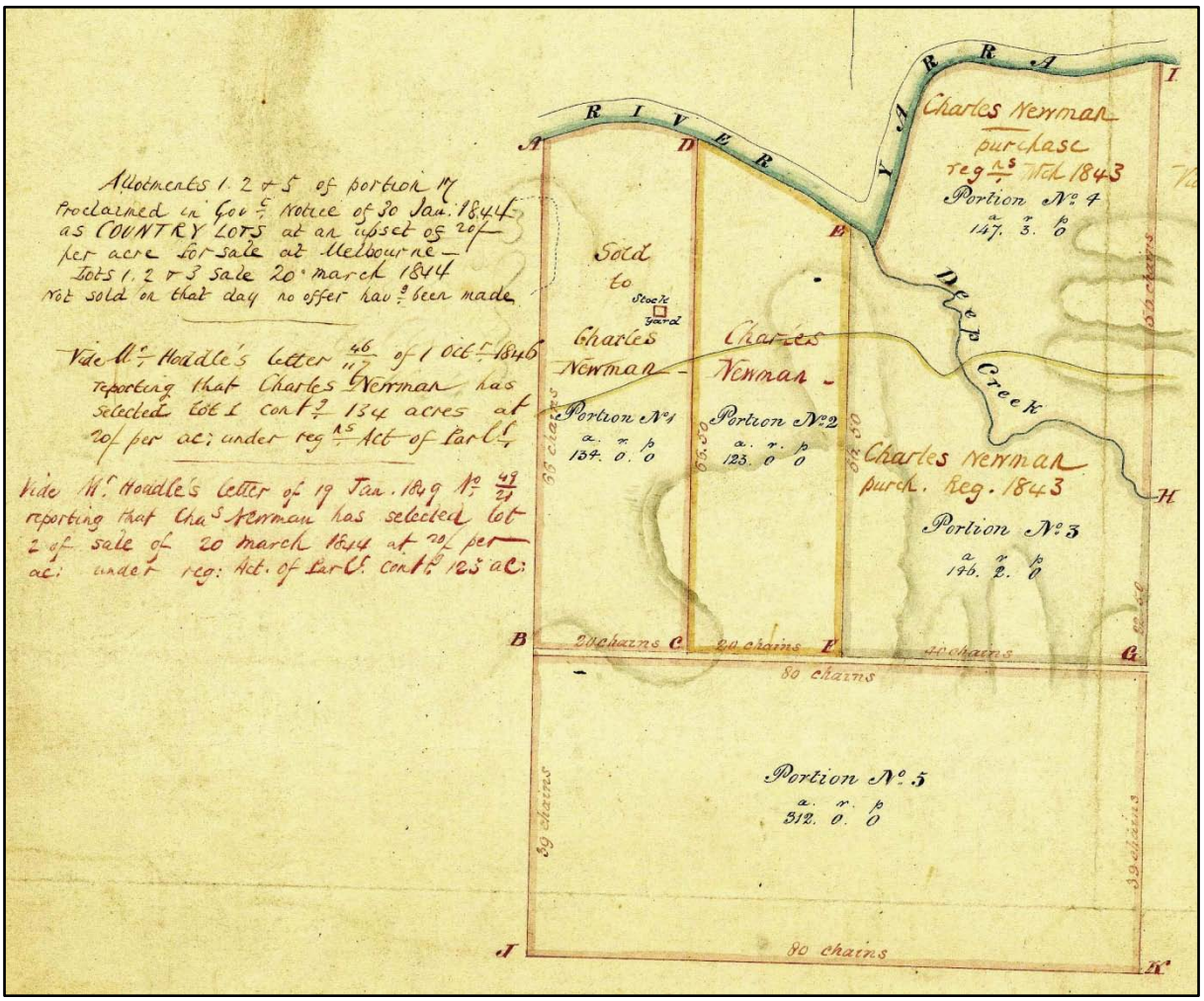



***Figure 2a*** *Excerpt, plan of subdivision of Portion 17, allotments 1-5, field survey date Nov. - December, 1843, issued January 1844.* PROV VPRS 8168-P0005,Sydney B36.

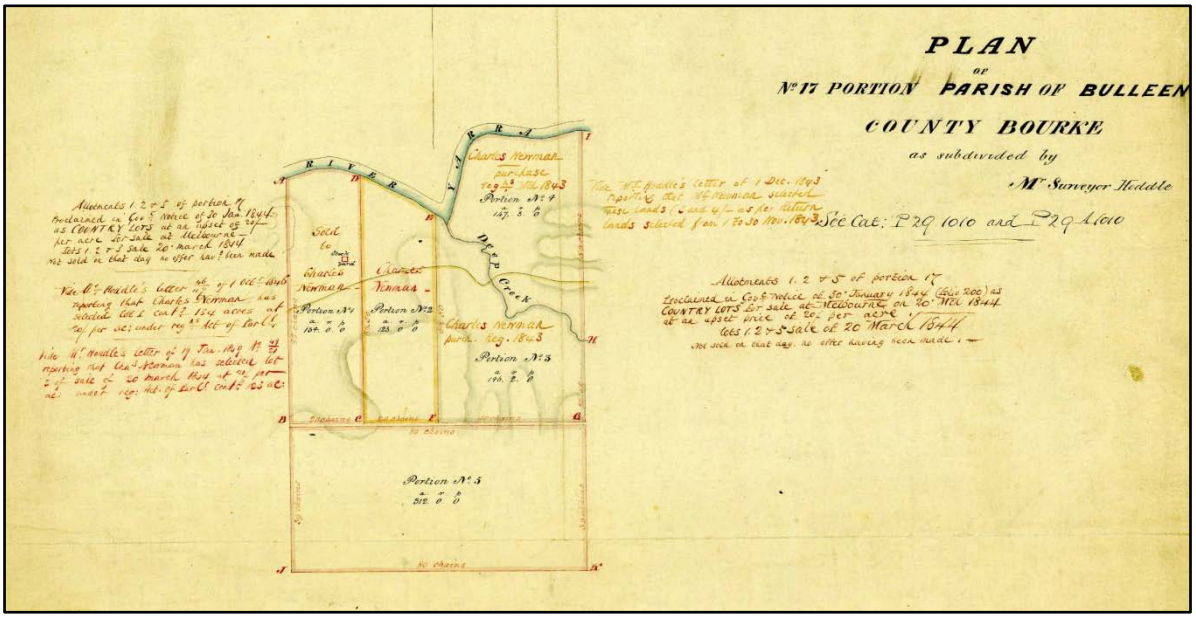



***Figure 2b*** *Subdivision plan with notations referring to Newman's selections and dates of surveys. Plan of No. 17 Portion Parish of Bulleen as subdivided by Mr Surveyor Robert Hoddle,* PROV VPRS 8168-P0005, Sydney B36.

1844/45[15] gave Newman his newest and closest neighbour and the middle Yarra Valley gained its first permanent settlement of owner/occupiers by the close of the first decade of colonial rule.

The legacy of the Newman tenure at Pontville is possibly larger than life owing to the Major's tenacious instincts to settle a new land in the last decades of his life and pursue his interests in horse breeding and racing during the most tumultuous period in Victorian immigrant and mining history. At the moment, only a historical outline of some random and some notable events survives to inform us about the Newman residency of the mid-Yarra Valley. Although missing critical first hand testimony or his own accounts, it nevertheless will assist to identify changes and developments on the property that can be tested by archaeological and fabric analysis. That summary is as follows.

Event Chronology for Pontville

**1838 - ca.1840 Initial Settlement of Major Newman and Family in Victoria**

- Newman, his wife Catherine and five children take up residency for a period of years in a turf hut(s) at the confluence of Mullum Mullum Creek and the Yarra River. Catherine's two daughters by a previous marriage may have been present some of the time, and the birth of their fifth child Mary Anne in 1841[16] raised the number in the household to seven individuals, not counting employees. On 1 July 1840 Newman acquired a depasturing licence for a larger area around his run[17]. Eye-witness accounts by Kerr[18] and by Robinson[19] describe their hut interior, the use of a detached (turf) kitchen as a dormitory, and the hut's location on the banks of the river opposite rapids. The possibility of there being more than one hut built during this period is raised by Robinson's comments from Newman in respect to erecting a second hut following flooding. Sheep described as diseased. This evidence, plus the fact that turf is available in wetlands, suggests the huts were most likely situated in the Yarra River flood plain below the Pontville homestead on one side of Mullum Mullum Creek or the other.

**1843 - 1844 Construction of Pontville Homestead and Horse/sheep Farm**

- Original floor plan consisted of three main rooms, front and back verandahs under a single pitched roof, and end rooms at either end of the brick house adapting an Indian bungalow style. The first roof was clad in timber shingles which were probably made locally from stringy bark, using premium zinc alloy clouts on softwood battens. Heavy stone footing supported all masonry walls inside the gutter line of the structure. A loft possibly lit by dormer window(s) was built in the roof cavity. Transom lights were installed over external doors, but not side windows. Clay for bricks, stone for footings, pit sawn timber and possibly sand were obtained from the property. Verandah floors were either flat river stones or compact earth. Floor joists were installed at ground level and supported a plank floor. Three sawn slabs of imported sandstone were used for the three fireplaces. High construction standards were maintained throughout. Lath and plaster ceiling installed in three main rooms, ceilings in end rooms open to rafter. Ashlar lines applied on render on external walls of main rooms facing front and back from wall plate to floor. First interior decoration was a pink lime wash although a blue wash was also applied on some walls. A succession of two wall papers featuring Victorian floral motifs and a plain undecorated paper are recorded for the Newman residency. These demonstrated a high standard in interior decoration. Window openings finished in either a plain white plaster or a timber surround, which carried decorative moulding. The door frames were trimmed in a single beaded architrave that were attached by hand-made wrought iron finishing nails.
- Hardware imported either from Tasmania or England included quality square shank wrought and machine-made nails, one of which is a first recording for Victoria, Ewbank patented nails and one type of cut lathing tack that were common in the 1830s global market are present. The nature of gutters, door and window fittings, and stormwater plumbing is not yet known.
- Household underground rainwater tank installed and its probable location is identified but construction details are unknown.
- Detached kitchen probably built at this time; location and fabric details currently unknown:- would have had large open fireplace. Archaeological study concludes the extant kitchen (late 19th century) is unlikely the site of the original kitchen.

[15] Unpublished manuscript of family research, in possession of Peter Cuffley, n. d.
[16] Death certificate of Mary Anne Crosswell (nee Newman) indicates she was born in 1841 in Templestowe and died in 1903 at the age of 62.
[17] Historical Records of Victoria, Vol 6, p158.
[18] Kerr,J H. 1872.
[19] Diary entry, G. A. Robinson, 30-31 Aug. 1840, describes trip to Healesville and back to Bulleen with William Thomas during which time the pair stayed overnight with the Newmans. For a full transcript of this reference, see Appendix 4.

- Newman household sometimes included a shepherd, a governess, other workmen.
- Location and fabric details of other outbuildings are unknown for this period. The location of a possible stables ruin is discussed here.

**1843-1860 Developments on the property**

- Cypress tree, Mulberry tree, and Hawthorne were planted.
- Private racecourse in flats below Monckton established by Major Newman.
- Additional cottages may have been built for hired help.
- South garden may have been established, retaining wall possibly built at south end of house.
- A stone shed, possibly a stables, may have been constructed north of the homestead.

**1852-54 Change of household/alterations**

- Major Newman and his wife leave Pontville to reside first in Melbourne and then in Hawthorne.
- Monckton is built with stone and slates, son Thomas moves into Monckton. Slate roof replaces shingles on Pontville, with Ewbank wrought iron nails used on timber, zinc alloy clouts on slates.
- Charles Newman Newman (eldest son of Charles) resides at Pontville as head of household. Rate books show he was not always resident in following years; property is leased.
- Timber window surrounds possibly installed.

**1860 Newman's Last Will**

On July 14, Newman prepared his last will and testament at Hawthorne stating that he owned 5 properties: (1) the 550 acre farm at Pontville, including Monckton, (2 &3) 2 half acre blocks in Hawthorne - one on Lennox Street which was his current residence, the other on Hawthorne Main Road ; (4) a property in Eltham (allotment 5 Section 2), and (5) another property with a house fronting on Lonsdale Street, Melbourne, occupied by a Doctor Brownless. Chattels included a stables, wine, liquor, linen, tools, horse gear, and so forth.

**1865 Change in ownership and inheritance distribution**

- Major and his wife die, their male heirs acquire Pontville and Monckton. Mary Anne to receive rental income.
- Major Newman' disinherits Thomas if his youngest son marries a certain woman.

**1882-1890 Construction of Extant kitchen**

- Two room timber building with kitchen and laundry/bath facility, built on stumps next to homestead. Northcote bricks used in fireplace.
- Corrugated iron roof with lead headed nails installed, wire drawn rose head nails in framing.
- Pine weatherboard exterior cladding and interior lining installed.
- Mortise and tenon construction of wall studs
- Baltic pine lining of ceiling and walls.
- Is probably the second detached kitchen built at Pontville by this time.

**Post-1882 Kitchen alterations**

- Plumbing installed in detached kitchen, Northcote bricks used in drain after shower installed.

**ca.1896 - 1906 Second Residence Built, farm leased out.**

- Weatherboard two room cottage was built in Pontville paddock by Sam McCauley. It is likely that it was later referred to by George Hawthorne as Webster's Cottage, after Robert Webster.

**1910-30 Pontville as dairy farm –Period of Multiple Tenants Begins**

- Slate roof fabric removed from house and new rafters and battens covered with corrugated steel sheets, lath and plaster ceilings removed, replaced with Baltic pine ceiling; loft entrance closed between 1909 - 1925. Some original pit sawn roof timbers containing first nails utilised in new roof.
- Original house layout unaltered.
- Dairy is built--mortise and tenon framing with some second hand corrugated iron roof.
- Brick-lined (Clifton bricks) tank with domed roof built at dairy
- Original flooring in three main rooms of house probably retained.
- Plumbing installed in detached kitchen for use at hearth and washing copper.

**1930s Residential precinct (as depicted in photographs and eye-witness)**

- Original layout of house intact, 1933 *Age* article identifies occupants as tenant dairy farmers.
- No indication of early 19th century kitchen or buildings near house.
- Corrugated metal water tanks are present on stands at eastern corner of 1880s kitchen and at SE corner of house. These suggest that plumbing may have been installed in house.
- Unexplained surface decoration/pattern on rendered wall of east verandah
- South garden in use.

- Open verandahs of homestead covered by flat stones.

**1950-55 Mass renovation- Leslie Eric Paddles Ownership**

- Leslie E. Paddles purchases allotment 4, containing Pontville, 21 February 1950.
- External walls of original end-rooms demolished and replaced by single leaf brick dwarf walls which enclose front and back verandahs; all new interior plaster, louver windows, new interior kitchen and bathroom/shower installed in east verandah and SE corner of south end room; house connected to electricity grid and wired; new internal plumbing installed; new floors installed at higher level; new ceilings of caneite nailed over early timber lining.
- Terracing of front garden and east side of house.
- Large water tank installed high above kitchen for increased pressure; pumping station built at Yarra River. Septic system and outside flush toilet added.
- A second door is constructed in the detached kitchen and cement sheeting placed on south face.
- Several stages of further renovation suspected in subsequent decade.

## 2.2 Pontville Homestead Construction Date.

It is unlikely that the Pontville homestead was built until Newman had gained some degree of secure tenure over his land, although he was licensed to run stock from July 1840. A 1841 census report records Major Charles Newman as head of household at Deep Creek living in a turf hut[20]. A title search by Kellaway (1994 appendix 2) and contemporaneous survey plans give a chronology of Newman's settlement that suggests a plausible construction date for Pontville. He purchased Portions 3 & 4 on which the homestead is situated on 18 March1844 and was registered on the title as "Crown Grantee" the following month. Surveyor Robert Hoddle conducted this subdivision of Section 17, but according to hand written notes on this subdivision plan, Figure 2b, Newman had already selected the land between 1-30 of November,1843, after Hoddle's initial survey of August 1841. Witness testimony given in the Supreme Court[21] by surveyor John James reported in 1848 states that the Newman family "had settled" by 1844 at the station and that business with Newman was conducted "in his house" in the period 1844-45 following readjustments to his property boundaries as undertaken by James. This suggests the family resided in the Pontville homestead by 1844 and that construction had occurred earlier, possibly started in late 1843. These are the strongest contemporary observations yet uncovered suggesting a construction date for Pontville of 1843-44.

## 2.3 Historical Images

There are four images of Pontville which shed light on the early 20th century fabric of the homestead and its likely stages of renovations. These are the only historic images of the homestead found by this study. These are described as follows:

**Photograph 1.** A photograph taken by photographer and avid book collector John Kinmont Moir and attributed a date of 1933. The view is towards the rear of the detached kitchen from the entrance track with a buggy parked near the kitchen. Two chimneys, one a single flue, the other a double, stand above a corrugated iron roof.

**Photograph 2.** An undated and unsourced photograph of the rear of the homestead in a similar condition as that represented in the Moir photograph, a clothes line, household items, and furniture showing in the foreground.

**Photograph 3.** An undated photograph of the homestead in full view from the front garden, published in *The Age* newspaper on 26 August 1933, accompanied by a lengthy article about the Newman legacy in colonial Templestowe. This image was copied for use in a historical display and previous studies of Pontville. A version of that image, published by Poulter (1985:3) but almost certainly supplied by Ervine Green, has been photographically modified in respect to the chimneys and to this extent is incorrect. Only the original published image copied photographically appears in this report.

**Photograph 4.** An undated photograph of the homestead taken from the across the Mullum Mullum Creek from the north-west. This photograph was given to Brian Mullens in ca.1967 by an unknown source[22] during a heritage day civic function in Templestowe. Copies of this photograph were obtained by the National Trust of Victoria and the Friends of Pontville.

*The Age* image is significant to this study because it is the earliest and best published image to clearly show the form of the homestead, but its creation date is unclear. It appears to faithfully present the general house

[20] Census return no. 54 for New South Wales, stated that nine free people inhabited the property in 1841. The record was obtained in May 1841.
[21] *Geelong Adviser 8 Nov 1848 ,* court case brought by Major Frederick Berkley St. John against publisher John Pascoe Fawkner for libel. Newman and others testified about their knowledge of dealings with St. John in relation to land transactions.
[22] Mr Brian Mullens, pers. comm., July, 1997.

layout and roof form as it is currently known. The slight differences in pitch of the roof between the two ends, the position of the single and double flued chimneys in respect to the cypress tree, and other distinctive characteristics of the house seen today are accurately preserved in the image, suggesting faithful reproduction of details of importance to this discussion. The corrugated roof on the homestead ensures that the image is certainly 20th century. Apparent distortions in perspective suggest that the image might in fact be an artistic rendition.

An on-site comparison of *The Age* image was made against the current homestead from various vantage points. The optical axis maintained in the image is sufficiently off-set to the south (right) of the building to enable the southern end wall of the house to be seen. This perspective creates a blind spot for the entire northeast side of the house where datable additions are present. Despite concerted effort which included climbing trees in the front yard, the author was unable to recreate this perspective. In fact the current land topography falls sharply away into the creek channel on the southern side of the house to the extent that it is not possible to replicate this specific view from existing ground level. Even taking up positions in the trees, it has not been possible to detect either the chimney of the detached kitchen or the high timber water tank stand at the north-eastern end of house. A minute dark projection on the left hand side of the roof line of the house in the image may be the CI water tank relief valve but field testing suggests that none of the detached kitchen is visible from that particular perspective until the optical axis approaches the elevation of the gutter. The low narrow object on the ground to the left of the northern end wall could be the dairy, which site tests suggest is visible from this angle. This evidence indicates that *The Age* image is almost certainly an accurate representation of the earlier 20th century building and that significant alterations in topography of the front yard have taken place after it was created. The creation date for the image is most probably its publication date.

The other three images are copies of photographs and the accounts of eye-witnesses Morrison and Hawthorn discussed below amplify on and verify certain fabric details in these prints as they were known since ca. 1935. Vegetation and other fabric shared by these images were analysed in an attempt to identify changes which would allow independent chronological ordering of them, but without success. In light of informant testimony, all these photographs will be considered contemporaneous with them until 1950 when the homestead underwent its greatest changes.

The two close-up photographs of the rear of Pontville capture the homestead in similar untidy conditions, the most significant changes occurring in yard vegetation, the water catchment and storage systems of both the house and the detached kitchen. An analysis of the images themselves which incorporates the testimony of eye-witnesses reveals the following details of the home precinct:-

House:

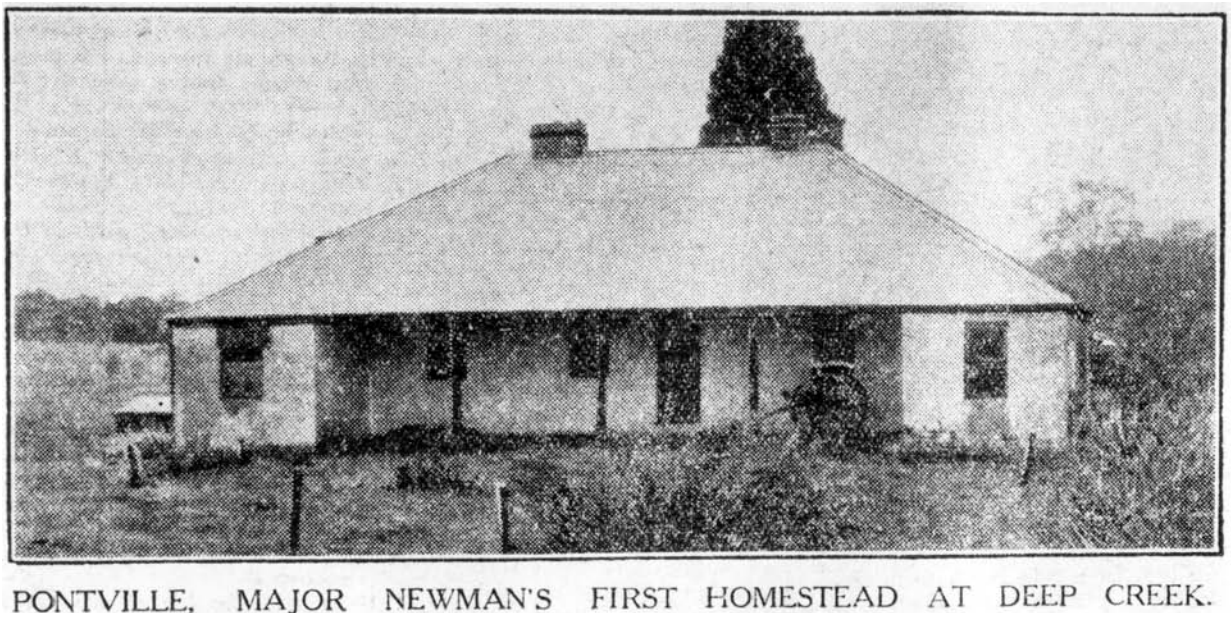
- The form of the house is fully symmetrical, along both a mid-section and a long axis, thus producing one form of the classic bungalow design with end rooms separated by a core room area and front and rear verandahs under the one single pitch roof. An exterior wall render was struck with ashlar lines to give the appearance of stone masonry.
- The roof is corrugated iron and has standard “D” gutters.
- The timber frames for both the windows on the verandah and the end rooms facing the rear are exposed through the rendered brickwork, the sill and head boards inset well into the wall.
- The window sashes are glazed by multiple panes, possibly three across and four up.
- Although details of the wall openings into the house from the rear verandah are not visible, the placement of some windows and doors are. These are; a door enters into the south end room and another into the north and central rooms, but no door exists between the south room and the rear verandah. Windows were located in the south and central rooms but not the north room. (Fabric analysis discussed in the following chapter will conclude that these openings remained unchanged, except that the south room window was made into a doorway). A window in the south end room appears to be present in *The Age* photograph but there are no images of the north wall in the north end room for comparison.
- Curious dark rectangular areas are visible underneath the verandah on the walls on either side of the window in the south room, possibly surface decoration.
- A small, corrugated iron water tank with a domed cover is set on a stand at the south-east corner of the house in each of these photographs. This tank is not in the same position as the one discovered by archaeological investigation discussed in Chapter 4.
- Both original chimneys are preserved above the roof line during the period represented by these photographs. These are both a single and a double flue ventilation.

Kitchen:

- A corrugated iron water tank is present on a stand (not visible) at the south-east corner of the detached kitchen, along with guttering and down pipes in the Moir photograph but not the other.
- The weatherboards are warped and show signs of disrepair.

***Photograph 1*** *Photograph of Pontville from the rear yard by J. K. Moir, dated 1933. Reproduced by permission of State Library of Victory, Latrobe Picture collection, Library Record No 823253.*

***Photograph 2*** *Undated photograph of Pontville from rear.*



PONTVILLE. MAJOR NEWMAN'S FIRST HOMESTEAD AT DEEP CREEK.

***Photograph 3*** *Pontville as published on 26 August 1933 by The AGE newspaper. This image is obtained by photographic reproduction from the State Library of Victoria, permission given.*

***Photograph 4*** *Pontville as photographed from entrance track near Monckton, undated. National Trust file No. 2814..*

***Photograph 5*** *Shown here in a derelict state is Monckton, built in 1853-55 by Charles Newman from stone and slates. Courtesy Mr Irvine Green as photographed in 1960s. Green reported demolition of this house in 1969.*

Rear Compound and Garden:

- Vines are growing on a trellis in the yard and an old fruit tree survives near the south garden stone wall.
- Various timber and wire fences and enclosures divided up the rear compound area.
- A low dark object, possibly a stone wall or building fabric, is seen in the extreme left of the Moir picture at ground level. Brick foundations discovered in the archaeological investigation at this locality may be this structure.
- The stone wall of the south garden rises above ground level at least two courses high. There is no stone wall at the northern end of the house.
- A single cypress tree dominates the back yard and appears approximately the same shape and size as it does today.

## 2.4 Oral Eye-witness Testimony

Two Templestowe residents grew up on properties immediately adjacent to Pontville and visited it regularly as kids to work, to camp, and to visit with the tenants. The background of these participants in the history of Pontville up to 1997 when interviews were held is as follows.

George Hawthorne was born in a house on Watties Lane, Templestowe, in July 1920 and worked there as an orchardist, first for his father, and then as owner of the family property until his retirement about 10 years ago. As a youth, George was taught by Florence Newman (Major's granddaughter) at Monckton when it was a school house and he learned something of the Yarra Valley properties through her generation of the Newman family. His first recollections of Pontville started at age six when his parents spoke about the tenants living on the property. As a young teenager, George was asked to fetch milk everyday for his mother, sometimes milking cows and cooling the milk as a part of his chores. This he did at the Pontville dairy after school. To do this he first pumped

water from the domed underground tank up to another water tank where it trickled through cooling equipment to cool the milk before it was carted away to the factory down the road. He helped pour the concrete floor beneath the former cow and hay shed when he was about 20 years old. He identifies the gable roof there as that belonging to the dairy. George remembers that in the early days, the old log bridge across the Mullum Mullum Creek to Pontville was often under water and crossing it was quite a feat:-"one just put it (the car) in first gear and hoped for the best". George recalls the Fay family and the Berry brothers at Pontville and one old bloke who kept a lion penned up in the South End Room for several months. He reckoned the lion was on show at a local circus or employed in a film set. George pointed out the spot high on the hill just before crossing the creek near the leaning Yellow Box where his father told him stone was quarried for Pontville. He recalls that in those days one could cross the creek almost anywhere near the homestead because it was not as steep nor as deep as it is today. The reason for this is that increased run-off from residential development has caused massive down-cutting to the stream banks. He recalls that old Bob Webster (owner of Pontville c. 1911-1951) was a difficult man to get on with:- almost everyone had difficulty with him. He recalls that there were frequent turnovers of tenants at Pontville, mostly because they had blues with him. Webster sometimes lived in the homestead, but he most often stayed in his 2 room cottage in the crop paddock (the cleared field to the east) whenever he was on the property—he lived in Williamstown.

Jim Morrison was born in 1936 and lived next to Pontville with his parents at Monckton, and, like George Hawthorne, regularly visited Pontville to work and to fossick around, and even to do a bit of rabbiting. The two in fact were close friends despite the differences in their age. He knew the valley like the back of his hand up until Pontville came into the hands of the Paddle family. He recalls setting traps in the warrens that formed around the house whenever it remained unoccupied for any length of time, and occasionally he was able to bring in ferrets to increase his catch. Because the new owner discouraged people from wandering over the property, he lost contact in the 1950s and then became more involved as an orchardist in a nearby property.

### 2.5 Fabric Description from Witnesses

The testimony of these two men is based on a close association with the Pontville property during the period ca. 1935-1950 and was discussed on site with the historical photographs in hand. The following summary lists the highlights of their observations, with the informant's initials set in parenthesis if the observation originates from only one of them.

*Exterior to House*

- Both men reported that the front garden was a slightly flattened surface which sloped naturally away towards the creek and the river flats. The terraces and the stone retaining walls seen there today were not present when they knew the property. There were no structures or a garden of any kind in this area in front of the house.
- The low terrace on the southern end of the house was a "sunken" garden (south garden) which had been there ever since they knew the place. At the upper boundary was a skilfully made 4' high stone wall which ran from the front of the house to well behind it in the rear compound.
- A underground rainwater tank was in use in the early days. It had a domed roof, was round, and was rendered. Water was drawn with a bucket tied to a rope, but a hand pump may also have been used, as is suggested in the 1933 *Age* article. It was located between the house and the cypress tree in an area that is south of the mid-line to the house. Only an approximate location is known and it was taken out of use and filled.
- A toilet was located to the rear of the house slightly offset with the line of the upper south garden wall. It may have been a one seater and employed a pan disposal system. This means that a pit was not dug to catch waste. Photograph 30 may show this toilet, albeit removed from its position of use. On the other hand, a brick foundation at this location discovered by the archaeological investigation may relate to a toilet.
- An in-ground domed-covered brick tank at the dairy collected its water as run-off from the roof of the diary and cow shed. The bricks in the tank casing bear the manufacturer's name "Clifton" in the frog.
- Two water tanks were located on stands at the eastern end of the kitchen, one at each corner. A smaller one was situated at the SE corner of the south room. (G. H.)
- A chicken coop with skillion roof and wire net yards was located to the rear of the house beyond the existing security fence and near the former garage.

- The only structures present in the home precinct around the house during their lifetime were the detached kitchen, the underground rainwater tank, a garage, and the chicken coop.
- There was only a bath and a copper in the wash house.
- The area immediately below the stone retaining wall in the south garden, especially the steeper embankment to the east of the garden was a disposal area for household refuse, although some was also tipped into a gully on the track at the creek. (G. H.)
- The site of the ruins of a roofless stone building consisting of remnant walls and "stone pillars" was pointed out by G. Hawthorne 55 m due north of the northern end room of the house in line with the old Hawthorne hedge. It was standing on an artificially levelled area on the hill-slope next to the track that went to Webster's cottage in the cropping paddock. George recalled that it was only there in his youth and although details are vague, it could have been the size of the detached kitchen. He didn't know its function but described it as skilfully built with flat stones of the sort found in the house footing. A stone concentration exists at this site indicating its exact position.

*The House*

- In moving between the house and detached kitchen, a person always entered the house through the north room as a matter of course. The end rooms of the house did not get the traffic, at least not by visitors. The central room was probably the sitting room.
- A water tank and stand did not exist at the corner of the interior kitchen. (J. M.).
- A doorway joined the south end room with the front verandah, but there was no opposing door into the north end room from the front.
- The front verandah was paved in flat stones. (J. M.)
- The form of the front of the house has always remained unchanged (as seen in the *AGE* photo-graph) for as long as both informants can remember.
- A doorway was located in each of the end rooms from the rear verandah. (G. H.)
- The verandas were dirt covered and had no pavement. This may also have been true of the south end room where the lion was kept. (G. H.) [a thin mortar pavement beneath the raised floor
- A skillion roof was built over the detached kitchen leading to the house. (G. H.)

# 3 PONTVILLE FABRIC

## 3.1 Introduction

Judging from the testimony of most sources reviewed by this study, Pontville has survived the onslaught of development, fire, and floods in the Yarra Valley with some grace for something in excess of 170 years. This assessment to identify the layout, artefacts, and other distinguishing features of early 19th century Pontville draws heavily upon three main sources of information. The first is a clear description of the extant fabric with special emphasis on areas of renovation or repair. The current form is an outgrowth of earlier layouts and therefore an understanding of them assists to clarify the evolution of changes to the original fabric. The second source, the historical documentation, involves a simple analysis of photographic or other images revealing details of the building fabric captured by the camera. In practice, this requires microscopic inspection of images from the 20th century, but no 19th century image has yet surfaced. This gap may be filled with a more comprehensive search for photographs from the Yarra River. Thirdly, a physical analysis of architectural fabric pursued during demolition or excavation of some of the post-1950s materials enabled a much closer inspection of underlying fabric than was formerly possible. This chapter develops each of these lines as separate discussions in support of a concluding section. The name of each room of the homestead is given in terms of its position in the layout adopted by Peterson (1994) because room function remains unknown. The 1990s external layout of the Pontville homestead is illustrated in Photographs 6 -9.

## 3.2 Fabric Reference Collection and Photographic Records

In the course of this study, samples of the Pontville fabric- the nails, wall finish, shingles, roofing timber, architrave, beading, plaster and mortar, bricks, and other structural material- were collected and catalogued for future reference. The collection contains a comprehensive cross-section of the essential fabric of the Pontville homestead, and to a lesser degree, the detached kitchen. Nearly all samples were obtained as demolition or construction debris. Where specific samples are referred to in this report, a bold printed prefix letter and number is shown in brackets, eg. ("**S7**," denoting a hand sample, and **N2.1** a nail). The collection will be held by Heritage Victoria in its laboratory facility. A small number of samples from Culla Hill, referred to by the prefix "CH", are also present in the reference collection. The catalogue of the Pontville collection is presented in Appendices 5 & 6 and Culla Hill is presented in Appendix 8.

A photographic catalogue was also maintained in the course of this study and images from it are attached to a CD provided to Heritage Victoria and Parks Victoria for reproduction use. All images were obtained on colour film, both slide and colour negative, and are held by the author.

## 3.3 Pre-1950 Floor-plan, Layout and Elevation

The surviving fabric of the Pontville homestead consists of a three leafed brick carcase of three core rooms which rise to the roof above a central loft, heavy pit sawn timber ceiling joists, a double fireplace serving both the central and north rooms, timber floors in the three core rooms which finish two steps above ground level, the sub-floor remains of a single flued fireplace in the south room, and a new single leafed brick dwarf wall which forms the outside of the building, including the former verandahs. Concrete floors surround the core rooms just above ground level all round the house, except for a raised timber floor in a new kitchen and bathroom in the east verandah. The roof consists of corrugated iron sheets laid over kiln-dried hardwood roofing timber and a second-hand CI roof which was recently put over the first as a rescue. Remnant floor boards and an entrance hole through the ceiling joists in the south room indicate a former loft within the roof cavity above the three core rooms. A stone footing is barely visible in the ground below the gutter line for about half the perimeter of the house fabric and disused ceramic septic pipes, and galvanised iron water pipes are installed on the rear of the house. A renovation render covers all interior and exterior masonry from ceiling downward, through which buried electrical conduit has been installed. An ashlar ruled and blackened pattern on old render is visible above the 1950s ceiling joinery on both the front and back verandah faces for their entire length, and, presumably extended from roof line to former external floor, although that render has been replaced or covered over below the 1950s ceiling.

***Photograph 6*** *Rear view of Pontville homestead in early 1990s.*

***Photograph 7*** *Front of Pontville homestead facing Mullum Mullum Creek 1997. The front terrace can be seen in foreground and the roof seen here is a recent rescue to keep the weather out.*

***Photograph 8*** *Rear of Pontville, 1997, during stabilisation program*

***Photograph 9*** *Rear of Pontville with detached kitchen, at the time of investigation in 1997.*

A scaled drawing of the buildings compiled by Richard Peterson and Associates, is used here as a base plan for this study. One additional small but important change to that plan has been made here: the kitchen and house have been drawn closer together to more accurately reflect the fact that the foundations of the two structures overlap by approximately 3 cm. Otherwise, the overall dimensions, form, and structures represented in that plan are used here.

The Site Plan, Figure 3, shows the layout of the core rooms, open verandahs, end rooms, fireplaces, and all other features which were present in the house during the period 1930-1950. The gutter line has been reconstructed from wall plate notches in the extant rafters, disregarding post-1950 renovation fabric. Wall opening as they were known at the time have also been faithfully incorporated where information is available. It should be noted that none of the exterior end walls are visible in the available imagery, except that a window opening is suggested in the south end room end wall in *The Age* image. Measurements taken with tape and plumb bob from key locations have enabled a scaled drawing to be compiled of the elevation of Pontville showing relationships of roof, loft, wall heights, and footing. The stone footing OD for the house measures 10.6 x 17.40 m, the extant ceiling height above the extant floor is 2.71 m and the projected 19th century ceiling height of 2.84 m is based on measurements obtained above the original front door sill as discussed in Chapter 4. Living space for the building, including loft area, amounts to ca. 230.0 square meters. The elevation of the homestead is shown in Figure 6.

The detached kitchen prior to the 1950 renovation was a timber frame structure set on stumps or masonry with a brick fireplace at its western end. Although the firebox itself is damaged, the masonry forming the chimney is fully intact and is lined inside with timber panelling. It was clad in weatherboard on all walls, it had at least one above ground water tank and one entry door exiting into the rear yard. It currently has two external doors and until recent vandalism, cement sheets covered the south long wall. A highly fragmented and repaired concrete path extends the full length of the kitchen along its southern long side, which narrows considerably as it continues beyond the building to the east in a thicker solid concrete path.

The method in the early 1950s of enclosing the house with new brick walls deserves special attention because it reveals important renovation sequences from previous form. Early accounts suggest that the new masonry dwarf walls recycled the original hand-made bricks up to window height, a practice which would normally make good building and economic sense. However the bricks visible behind the render of this renovation are machine-made and bear the company name “Glen Iris” stamped in a single frog, one way up. The concrete and stone footings of this wall in the rear and north end of the house are laid against the inside edge of the original stone footing. The notches for the wall plates in the rafters are positioned to allow for the new wall to be erected directly inside the old one while it remained intact, thus giving roof support during construction of the new wall. This means the hand-made bricks were removed after renovation as surplus to requirements. It illustrates the method used to retain the earlier roof line unaltered in the 1950s renovation and that the previous house had no eaves. It also explains the presence of exposed footings that were abandoned to complete this renovation around the house, as discussed below.

### 3.4 The Timber Roof and Roof Cavity

The brick core wall rising above the ceiling joists, Photograph 10, is reduced from three leaves to two, giving the loft a ledge around each room the width of a single brick. This ledge coincides with the top edge of the insert holes for the joists. The roof consists of modern sawn 3 ¾ x 1 $^{7}/_{8}$ inch hardwood for the ridge pole, rafters and both interior and exterior wall plates throughout the structure. The presence of double notches at the lower end of each rafter indicates that two separate outside walls carried the roof during the 20$^{th}$ century and the roof itself is obviously a 20$^{th}$ century renovation. Two layers of corrugated iron sheets cover the roof, the first one bearing manufacturer’s marks identified as being first made for the Australian market in 1908 (Lewis 1994:7).

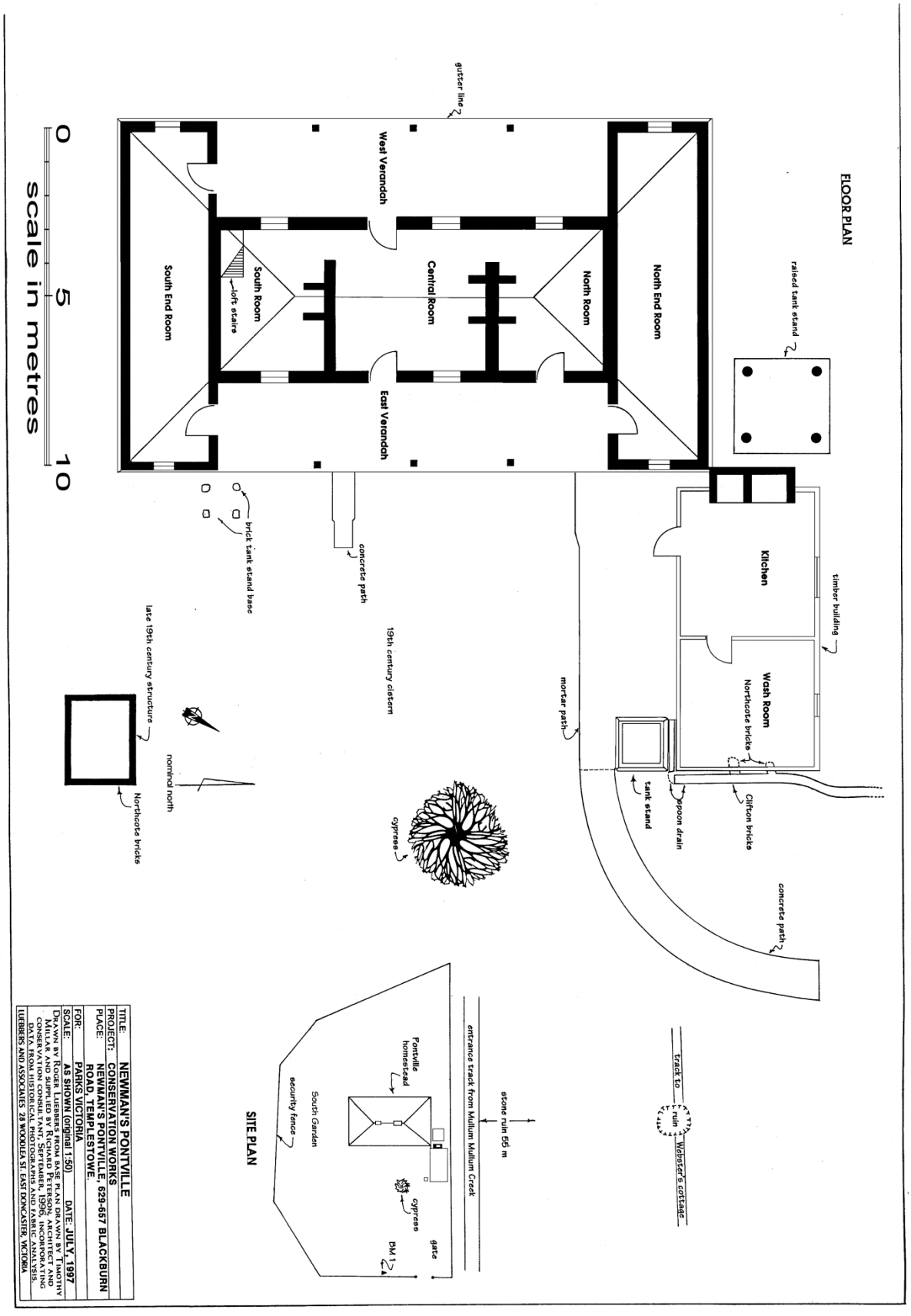



***Figure 3*** *Site Plan of structures in Pontville Homestead precinct.*

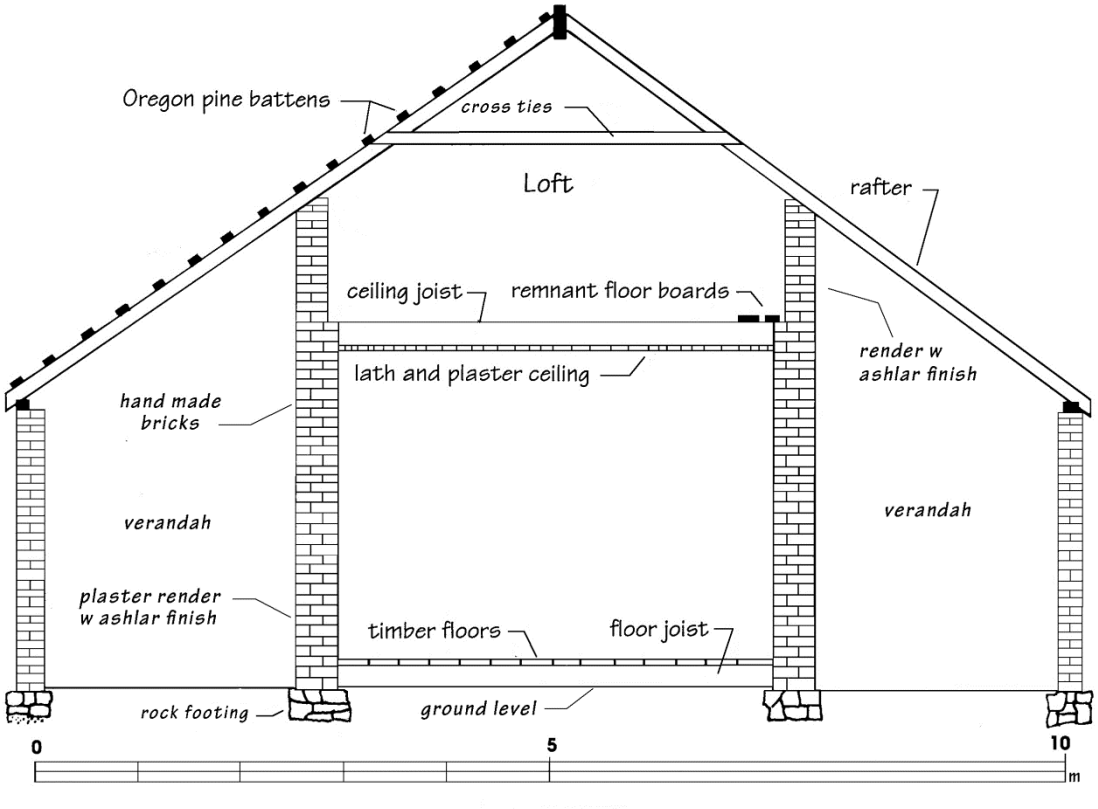



***Figure 4*** *Cross-section of Pontville homestead pre-1950. Height of lath and plaster ceiling over 19th century plank floors is ca 2.83 m. R A Luebbers.*

Some extant roof timbers are pit sawn and contain nails and markings which are clearly derived from an earlier roof on the house. These have been incorporated as cross braces for opposing rafters and appear in two forms, as illustrated in Figures 4 & 5. The first is a length of rafter with a cross section of 3 ½ x 2 ¼ inch (nominal) which has definite marks of the battens evenly spaced throughout its extent and both empty holes and nails where the battens made contact with the rafter, Figure 4. This timber is currently attached by 3 inch rhomboid wire nails to the extant rafter over a lap joint that has not been notched, but appears to have been either cut at both ends at the correct angle of the roof pitch, or one end was installed without being cut. This uncut end contains either 3 inch machine-pressed nails toe-nailed to its top edge, or else empty square holes. The second timber is exactly the same size as the other, but lap joints are cut at each end at the pitch of the roof and 2½ inch machine-made Type 2 nails are still attached or square holes occur where they once were fixed, Figure 5. This timber is an original element of the previous roof which has been incorporated directly into the new roof without alteration and fastened by rhomboid-head wire nails. These two timbers illustrate the fact that rafters and other roof elements of the house were assembled by mid-19th century nails at two different times.

The Loft

A header beam installed in the south room ceiling, Photograph 11, formed the entrance to the loft by way of a steep stair case which was fixed to the base of the wall. The distinctive lath and plaster staining is clearly visible across the bottom edge of the common joists, as are marks from the trimmer strips that finished off the opening through the ceiling. Lewis[23] considers the use of the more expensive machine-pressed patented nail in planks in the loft an unusual practice for the 1840s and suggests that the extant loft flooring was installed somewhat later than this.

It should be pointed out in passing that the use of keyed mortise and shouldered tenon joinery in the header beam (illustrated by Lewis) with wedges used to clamp the timber members together, places assembly of the loft entrance strictly at the time of construction. The opening therefore must have

[23] Miles Lewis, 1994, p.6.

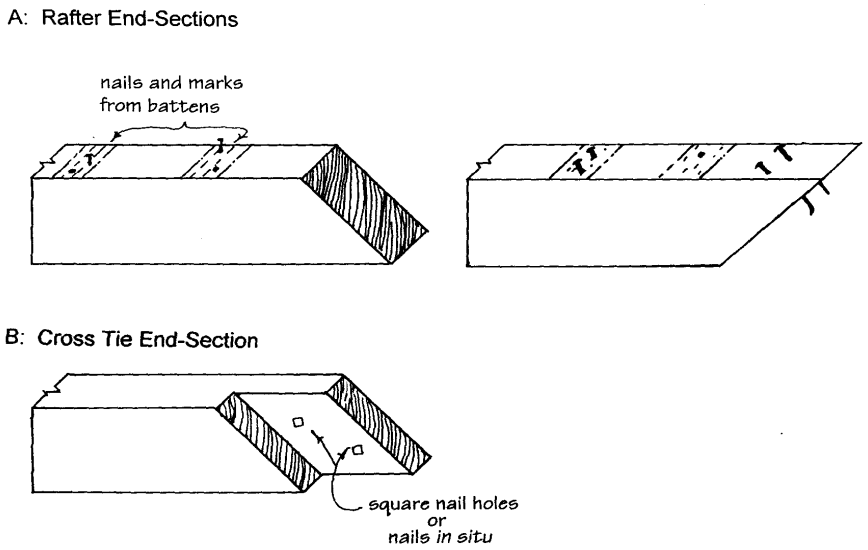



***Figure 5*** *Details of pit sawn hardwood cross-ties in extant roof showing mid-19th century hardware showing their former use as rafters. Some are off-cuts. The in situ nails are square shank Type 2. machine made nails. R. Luebbers.*

been included in the original design of Pontville and presumably the loft was inhabited from that time until the installation of a second ceiling permanently blocked access. This point notwithstanding, a succession of flooring may have been installed in the loft, possibly beginning with planks, or with bark as suggested by Lewis 1997 (pers comm).

The filler joist dividing the former loft opening in half is of some interest for this reason. It is fixed to the header beam with wire drawn nails made in the period 1870-1920 and it bears clear marks along all faces from a broad hand saw and is identical in every way to adjacent ceiling joists. However, a line of early 19th century lathing tacks (Type 1) runs along the upper edge in an irregular spacing:- close enough for regular lath and plaster installation in some locations, too wide in others. There are faint marks of plaster on the joist to indicate that it supported an early ceiling. In the lower edge are empty nail holes at a spacing which is consistent with floorboard installation, and it is covered by a thin grey slip along its length. This surface patination is identical to all other joists in the house except that it occurs on the bottom edge of this timber. A search located opposing empty insert holes for the most northern joist in the south room. Most probably this beam was re-employed during removal of the L & P ceilings throughout the house to close the loft entrance, albeit upside down. There is no insert hole for this filler beam in the masonry, an observation that reinforces the conclusion that the loft was a integral element in the design of Pontville at the time of construction.

A systematic search was conducted of the ceiling joists in the south and central rooms in 2013. At least 5 trimmer strips were nailed on the vertical face of some joists where dimensional irregularities required correction by the lather. These have the dimensions of softwood battens that elsewhere in the house fabric carry zinc alloy roofing nails as described below. Saw marks are generally indistinct in softwood used in the house but under strong cross lighting parallel saw kerfs are present at knots and dense sections of wood, suggesting cutting by either a reciprocating mechanical saw or a hand saw. These species of wood are not known from Victoria but forests with suitable softwood were being exploited in Queensland and Tasmania[24] at the time of colonial settlement of Port Phillip.

A detailed inspection with a strong light was made of the insert holes for the ceiling joists. The hole penetrates through the central brick leaf and many beams are positioned hard against the exterior leaf of the core rooms. This is to say that the joists are longer than the width of the core rooms by the width of four bricks. In some cases, the end of the joist was encased by mortar inside the insert cavity, obviously when it was in a plastic state. These observations confirm that the joists could only have been installed strictly at the time of construction and are not later additions.

[24] See Miles Lewis and *The Story of Port Dalrymple* by L S Bethell

***Photograph 10*** *Interior walls of loft. Slate, shingles, nails, and other fabric from former roof were found in crevices and ledges of the loft and in the sub-floor cavity below.*

***Photograph 11*** *Header beam and filler joist in loft opening, Pontville. Three shoulder and mortise joins are present in the beam and one of the tenens is fixed. Lath and plaster marks and nails are present on the underside of all joists, except the shorter joist that fills the former loft entrance.*

***Photograph 12*** *Limey wash appearing on these loft wall above the north room and on the double flued chimney are likely the results of rain washing wet mortar during construction; above north room, and hand-sawn ceiling joists inserted into walls.*

***Photograph 13*** *Sub-floor opening in north room showing joist insert holes in walls and underfloor vents.*

There are a number of ½ inch diameter vertical holes in the upper edge of some ceiling joists in the central room, each centre drilled at least 2" deep. Several occur in each timber, but the spacing does not even remotely match between joists nor are there regular intervals on any one joist. Half the length of some joists are free of holes, although systematic search was not made of all joists. These may be dowel holes and are typical of roof assembly of early colonial buildings in Australia to avoid the more expensive nail hardware. Or alternately they may be holes that were used to cramp freshly cut and warped floor boards at the time of installation as suggested by Willys Keeble (27/02/14 pers comms). Or they may be fixing points to partitions in the loft. A more comprehensive study is required to determine the significance of these holes.

The loft is an obvious repository for a myriad of materials which drop down during construction and subsequent residential use and demolition of a house, and Pontville is no exception. Three strips representing separate timber shingles (**S18-20**), two weathered (one with nail holes) and the other apparently unused, were recovered from beneath animal nests at the junction between walls and ceiling joists from around the loft. All have been neatly cut to a length of 14½ inches (370 mm), but all are incomplete along their widths. One is heavily weathered and discoloured, another bears fresh surfaces. These are almost certainly derived from the first roof[25] on the house. Slate fragments were also scattered in small quantities around the brick ledge and on the tops of ceiling fabric around the outside perimeter of each core room, as well as in excavation trenches detailed elsewhere in this report. No particular implications can be drawn from these pieces, other than that they derive from demolition of the slate roof. Off-cuts of pit-sawn timber, some with Ewbank style nails (**S15**) and cross-sections identical to roof timbers, were retrieved from beneath animal nests, presumably representing construction debris. Finally, a loose scatter of 19th century construction nails, some unused and some incomplete, has accumulated across the horizontal masonry surfaces of the loft, derived most probably from both construction and demolition phases. A selection of these materials was collected, although the search was not thorough and are discussed elsewhere here.

Staining in Upper Loft Wall and Joists

A sample of mortar containing a dark substance (**S8**), was removed from the basal mortar bed of the top most brick course of the west wall of the north room just below the wall plate, Photographs 10 & 12. It appears to be a haphazard mixture of mortar and dark oil substance, the composition varying considerably in the mortar bed examined. The substance appears to be mostly concentrated along half the room width of the wall, but is in other rooms to a lesser extent. A materials analysis determined that this material is most probably possum urine that has been absorbed by porous mortar.

A final observation worth mentioning is the loft-wide distribution of thin mortar slurry down the interior masonry surfaces, most notably on the double flue chimney. This almost certainly results from rainfall during construction before the roof was erected. Some mortar lines, again notably in the chimney are significantly washed out. A gray and white coloured substance also stains the upper joists surface, often flowing down both faces. This almost certainly is bird droppings.

## 3.5 Succession of Core Room Floors

The extant timber floors consist of standard T & G Baltic pine boards which are carried by kiln-dried 4" x 2" hardwood joists on 4 inch square red gum posts. The boards are fixed to the joists by modern 2 inch bullet-head nails and a ovolo trim in Baltic pine finishes the edge around each wall. The sub-floor cavity is approximately 45 cm high, although burrowing rabbits and demolition material/impacts have greatly altered the substrate contours.

While the extant floor was obviously installed in the 20th century, a sub-floor inspection was required to describe the original floor support system, the construction details of the door openings, and other features which might be hidden by the new floor fabric. Three areas of the house were examined to answer these questions.

North room Sub-floor

A set of narrow recesses in the eastern sub-floor wall of the north room, Photograph 13, was exposed by the removal of two floor boards and inspected with the aid of a mirror and a strong light. The recesses consist of two openings in the brickwork regularly spaced on either side of the door way beginning on the stone footing and extending up three courses. The end ones are set precisely in the corners of the room. An identical set was observed on the opposite but not the adjoining walls and recesses of identical design and arrangement were observed in the central and south rooms. Where these openings intended to be vents or a part of the floor support system?

[25] As quoted in the Conservation Policy Report, Context and Lewis, the Miller family reported finding shingles in the loft in the 1930s.

The external walls of the north room are triple brick construction and the exterior opening of each recess is plugged in the outer leaf with a hand- made brick, usually laid on its edge. If these recesses were sub-floor vents and were blocked by subsequent renovation, the mortar surrounding the brick would be more recent than the surrounding mortar of the original wall, in particular the hard mortar type. However, in every case (except the renovated door itself) this mortar is the same distinctive "soft" lime-rich type which occurs throughout the brick carcase. This convincingly shows that these openings were intended as insert points for the original floor joists and that the sub-floor cavity was probably unvented. None of the original intermediate support members were observed anywhere in the sub-floor cavity.

While examining the sub-floor carcase of the building beneath flooring with a strong torchlight, the following discoveries were made.

- An *in situ* sandstone hearthstone (1240 x 460 x 80 mm) and a supporting brick base appears to survive at the fireplace below the extant floor joists, the extant hearth built on top of it. An unusual undersized cream brick (eg. **S10** & **S27),** which Lewis mentions[26] appears to occur amongst the regular hand-made bricks in this base and they are incorporated in the firebox of the central room fireplace, although intermingled with the larger bricks (see file photos). Rare elements anywhere in the masonry at Pontville, they appear to be fire bricks. The hearth is believed to be identical to those found in the other two main rooms, although close inspection was not achieved owing to access limitation.
- A few individual undersized cream bricks are incorporated in the sub-floor wall masonry. Lewis (1994:5) considers these a mystery in the Pontville context and an image is included in the project photograph inventory.

Central Room Sub-floor Cavity at Front Door Opening

The decayed floorboards at the doorway were removed to inspect the frame of the front door, Photograph 14 and other elements in the sub-floor cavity. Demolition debris against the brickwork was excavated to expose the original masonry fabric and the contact between extant floor joists and the door frame. In this photograph is an unmilled pit sawn sill, seen beneath the current sill, its rounded shape being the natural curvature of the tree trunk. The lower sill is heavily worn wear and weathered. Base fragments of an earlier architrave on either side of the frame, Photograph 15, are pressed so tightly by short lengths of the extant joist that marks are formed in their milled surfaces. This suggests that the architraves were in use when the new floor was installed, presumably in the 1950s. This assembly obscures the joint work of the jamb behind them, thus making it impossible to say whether or not the lower sill is in fact an original sill or instead is attached to a newer frame which was installed in a later renovation. The short joist on the left jamb was removed to inspect the joinery behind and the area was brushed clean and photographed. The architrave was removed easily by hand—it was attached by a single small nail—and included in the artefact reference collection as sample **S13** (**N3.1**). The fabric behind the architrave was then photographed, Photograph 16, and the nail was removed. The following observations were made with the bare brick wall of the door opening fully exposed:

- The lower sill is pit sawn and extends well into original brickwork which is not repaired and was therefore installed at the time of construction. This installation method can be seen in the historic photographs for the rear verandah of Pontville as discussed in Chapter 2.
- The extant doorframe rests on top of the former sill and the surround of a new frame has been built around it to the modern standard of 2' 8" x 6' 8" (810 mm x 2040 mm). The opening of the former frame is 3' 0" x 7' 6" (915 x 2290 mm) which by modern standards is over-size.
- The frame continues above the head sill of the extant frame to the top of the masonry opening. An intermediate door head is fixed to the jamb by a keyed mortise and tenon and forms the surround of a 30 cm high transom light at the top of the door, Photograph 17. A glazing bead for this transom, sample **S17**, with a single half round edge, measures 5/8 x 3/4 inch in section and is painted an off-white.
- The wood of the former frame is a dark hardwood which resembles teak or blackwood. An effort should be made to identify the wood species.
- The broken remains of a hearthstone survives in front of the fireplace below the extant floor boards of the south and north rooms. An identical hearthstone appears to be *in situ* in the central room.
- The door opening in the sub-floor cavity is a renovation containing machine-made bricks. A fragment of one brick bears the letters "Ir…" in the frog indicating the Glen Iris Brickworks.

[26] Miles Lewis, "Pontville-Templestowe" 1994 p. 5.

***Photograph 14*** *This floor opening in the central room reveals sub-floor deposits excavated in this assessment. The string line marks the excavation area of Trench 5. Floor level is raised above original installed by Newman. Lower front door fabric is visible at top of photograph.*

***Photograph 15*** *Close up of architrave fragment, arrow, at original sill in internal door jamb, front door, Pontville homestead.*

***Photograph 16*** *Detail of base of the front door jamb assembly with moulding removed and showing hand-sawn hardwood timber, with modern sill at top. Former sill resting on bricks indicates original floor height.*

***Photograph 17*** *Detail of transom light frame, front door, with modern door frame representing alteration. A decorative architrave in a pale yellow paint is partially concealed by the lintel in the opening.*

- The architrave attached to the former frame is a soft wood of Baltic or Oregon pine milled in a single edge bead forming a Regency profile. A white brittle paint adheres to its surface. It is attached by two nails, one of which was too corroded to remove intact. The second one was removed by chiselling around it, but even then, its head was deteriorated and its tip remained in the frame. It has a square shank and is either a simple cut nail or a cabinet makers brad with four sided tapered point identical to those illustrated in Photograph 28k & l. The architrave and nail bear processing marks that are consistent with manufacture in the first half of the 19th century.

South Room

An opening in the floorboards surrounding the former fireplace in the south room gives access to the sub-floor cavity, Photograph 18. The base of the original firebox is fully intact in the opening and a sandstone hearth in front of it lies hidden below the new floor joists. This hearth was mentioned as a likely Tasmanian import by Prof. Lewis in his technical assessment of the building. The hearth rests on a brick base indicating its original position in respect to the extant higher floor level. The stone was moved slightly and a brick and attached mortar (**S27**) was removed from the base and included in the reference collection as a sample of the original fabric dating to construction period. Animal hair is embedded in this mortar.

Masonry from the hearth base includes the standard hand-made soft brick that forms the core masonry unit of the house. It also includes an unusual cream colour brick with dimensions of 40 mm thick and 10.5 mm wide (the length is incomplete) and is of some considerable interest, as mentioned by Lewis. The mortar is a Roman cement and appears to overlay a white mortar or lime layer on the brick surface, suggesting the brick is second hand. The house-wide distribution and possible significance of these rare bricks is discussed below.

Conclusions

The sub-floor cavity inspection has shown that the Pontville original floor was supported on heavy joists which were inserted into wall recesses at the level of the stone footing. The original hearthstones and timber frame of the front door survive *in situ* and thus indicate that the original floor level of the three core rooms of Pontville was approximately 130 mm, or the thickness of two bricks, lower than the extant one. This gives an original elevation of approximately one short step above ground level and the presence of Glen Iris bricks in the thresholds suggests that the floors were raised in the 1950s when Paddles carried out major renovations. The weight of evidence suggests that these alterations involved removal of the original architraves, wall finishing, and window timber belonging to the house during the first decade of its life. The flooring nails used in the original floor were probably either 2 inch cut nails, or they were a square shank hand forged nail (similar to those illustrated in Photograph 28a), although none of the floorboards or their supporting timber have been recovered intact to confirm this.

The original front door frame of Pontville was designed with a one foot fanlight and no side lights, giving the appearance of high openings and added light into the central room. Because the remaining external door openings in the house have identical portions and positions, it is likely that all external entrances had similar finishing details and dimensions.

A bed of weak mortar was uncovered beneath the extant timber floor in the central room which bears distinct linear impressions running parallel to the internal division wall in exactly the same spacing as the wall recesses noted above for the ground floor joists. The mortar bed is finished exactly at the height of the footing and therefore the bottom edge of joists inserted into the wall recesses would rest on this mortar. The mortar is neither strong enough nor positioned widely enough to have served in any way as a floor support system, and is considered to have formed haphazardly during construction, the impressions most probably resulting from floor movements rather than formal bedding at the time of construction. This evidence demonstrates that the original joists were identical in size to the ceiling joists and rested at ground level. A remnant fragment presumably from a floor joist was present in the cavity with extensive weathering and insect attack evident. The mortar is most probably a batching platform used by masons to mix mortar in the course of construction and is an exact contemporary of the build. The excavation of the mortar and its remarkable content is further discussed in Chapter 4.

## 3.6 Window and Door Openings

The “hard” wall plaster in the west window opening of the central room, Photograph 20, has broken away, exposing the interior cavity behind the window surround. Observed here is the wall fab-

ric consisting of hand-made bricks and the typical soft mortar, the remnant of the original white plaster adhering loosely to the wall, and the timber surround that joins the window frame. This timber is apparently sealed with a white paint. A 2-3 cm thick timber spacer with a square cross-section has been attached to the edge of the surround to extend it beyond the wall line the thickness of the wall plaster. It is to this strip that the missing extant architrave was attached. A similar spacer is attached to the surround in the north room, except that it is finished in a single bead for decorative affect. The surrounds in the other windows of the three core rooms are also finished in this manner. The assembly detail of the window surround is illustrated in Figure 6.

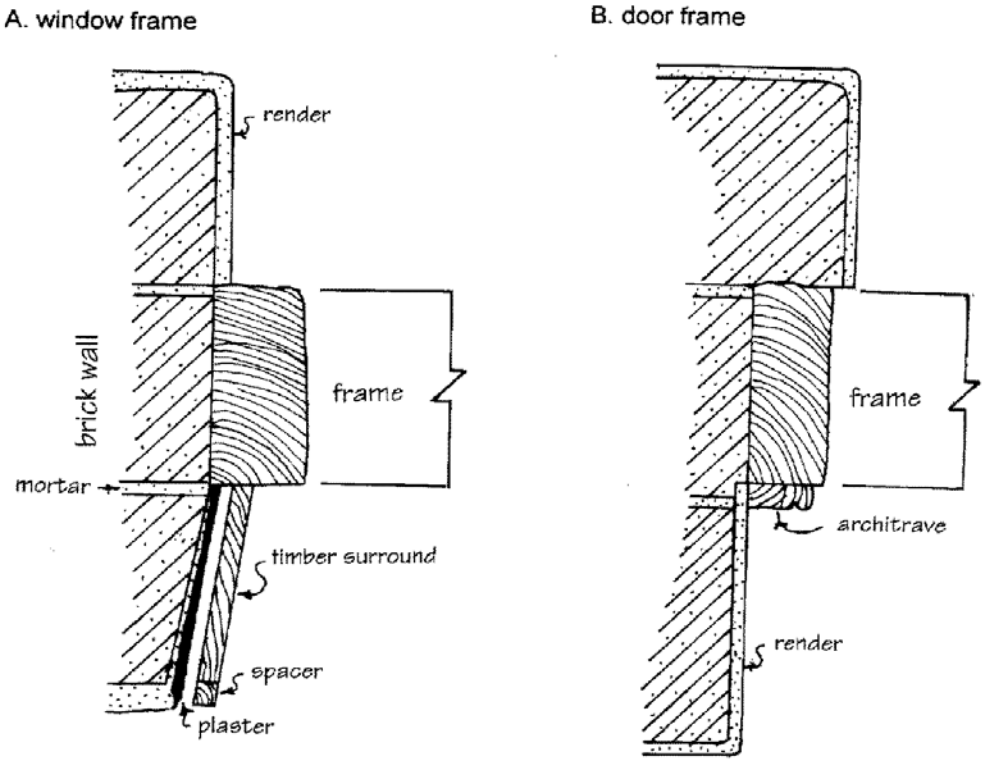



***Figure 6*** *Assembly details of window and door frames, central room, Pontville. Hand-made finishing brads are used to attach the spacer strip and architraves shown here.*

The strip around the window in the central room is attached to the surround by 2" hand forged cabinet makers cut nails which are described elsewhere in this report. Although assigning a particular date of manufacture for a hand-made nail can be unreliable, cut brads were used up until the 1870s when wire brads became a popular replacement in finished carpentry work. The unusual treatment of this nail suggests that the spacer trim and possibly the window frame were early elements in window finish for the house. The white plaster behind the window surround is most probably an original construction feature at some time in the first decade of habitation. However, the cabinet makers nails suggests that the surrounds (but possibly not the sash) in the window openings in the house are also a mid-19$^{th}$ century manufacture, possibly representing an early renovation during the Newman occupation or an original construction assembly. More analysis of the window frame and its installation details is required to prove this point and this must involve disassembly of the window surround.

The extant window frame was removed to examine the earlier joinery behind it. The softwood modern surround was attached to a hardwood timber frame behind it, the hidden surface being coated in a yellow paint exactly the same colour as the internal timber lining of the detached kitchen. Portions of the early frame are missing, presumably from demolition damage, but exhibit shrinkage and dimensional change similar to the pit sawn timber in the ceiling joists and door frame in the central room. This is clearly not milled timber, for some sections are curvilinear. A pattern of paint and weathering on the vertical members of the window suggests a middle divider between two sashes but there is no evidence of sash weights or wear of the sash against the frame. This circumstantial evidence suggests that the frames, like that of the front door frame, could be original to Pontville at the time of initial habitation.

***Photograph 18*** *Fireplace opening in south room with edge of sandstone hearth stone, arrow, beneath extant floor. The stone marks the original floor height. The demolition material beneath this floor contains significant mid-19th century fabric.*

***Photograph 19*** *Remnants of first ceiling plaster (arrow), in situ, caught between ceiling joists and wall, central room, Pontville,* ***S2****.*

***Photograph 20*** *Shown here is the timber window surround, beaded trimmer strip fragments, and attachment nails, with hand-made bricks exposed behind a renovation plaster.*

***Photograph 21*** *This sample of plaster is covered by a blue lime wash, and two layers of early Victorian period wall paper recovered from the subfloor area of the south room,* ***S 22.***

***Photograph 22*** *This is the first wall paper in the north room as found attached to a plaster fragment from sub-floor deposits. Scale in centimetres.*


***Photograph 23*** *Wall paper removed from the north room sub-floor area.*

## 3.7 Interior Wall and Ceiling Finishes

The ceilings in the house were attached directly to heavy pit sawn hardwood joists which were permanently set into wall recesses at the time of construction. A detailed study of empty nail holes, *in situ* lathing tacks, and demolished ceiling fabric indicates that three ceilings were installed in the three core rooms during the life of the house. The first one consists of a lath and plaster fabric, the nail holes, *in situ* tacks, and characteristic surface staining indicating the exact alignment and extent of it throughout the core rooms, although none of the fabric itself survives *in situ*. The second, described by Dr Lewis, is a Baltic Pine T&G lining board in a Regency profile which was fitted to the bare joists with early 20th century 2 inch bullet head wire brads after the lath and plaster had been removed. A varnish, possibly containing stain, was applied to this timber. The third ceiling was a Caneite fibre sheeting which was fixed directly over the timber lining with modern galvanised clouts after 1950. A fully intact example of the last two ceilings is preserved in the north room and should be protected in any future management program for the house. The installation of the timber ceiling appears to coincide finally with roof replacement in the early 20th century.

Two wall finishes were recovered in the demolition fabric beneath the floors of the house. The first, presumably applied at the time of construction, is a lime-rich sandy render which has been sized with animal hair to reduce cracking during setting. It is finished to a exquisitely smooth surface in a white lime plaster, although its appearance is often an off-white colour. This render is here referred to as "soft" render. The second render contains a hard setting cement (probably Portland Cement) and is generally gritty and not finely tooled– it is a post-1950s renovation. The only accessible traces of *in situ* render dating to the period of construction were found wedged between a joist and wall of the central room, Photograph 19 and **S2**.

The sequence of plaster renovations in the house suggests that the lath and plaster ceilings were removed at the same time as the slate roof, but the original wall plaster remained until major changes were made throughout, including raising the floor level. The fact that ceiling and wall plaster were both found in the sub-floor cavity indicates that at the very least, some floor boards were removed at the time the timber ceiling was installed, which in turn suggests that at least two floors were installed in the house, although not necessarily involving comprehensive floor replacement including joists.

Sub-floor samples of plaster were collected for detailed examination of possible wall decoration. The samples bear distinct markings of either lath or brick work on the back surface indicating that both wall and ceiling plaster are represented beneath the floors. Many contain small fragments of wall paper and lime wash in original position still adhering to the plaster, in some cases with two layers of paper, Photograph 21. Hand samples were given to historical architect specialist Phyllis Murphy of Kyneton for her assessment of their likely age and historical significance. The sequence of wall decorations, as can be based on these demolition fragments along with Murphy's comments[27] are as follows (see Appendix 10 for her assessment):

- The first wall finish was a lime wash in a pastel pink and blue on both ceilings and walls. Both colours occur together on the same wall sample and may have been contemporaneous on different walls in the same room.
- The first surviving paper, Photograph 22, (**S22a**) in the south room is a stylised floral motive separated by bands of parallel white lines and serial dots. Murphy considers this a typical Victorian pattern belonging to the mid-19th century, probably earlier than 1860. The lime washes were covered in the three core rooms by a succession of wall papers. The second paper, Photograph 21, (**S22b**) is a primitive stripe of abstract design based on a floral motif with a contrasting silver band against a white background.
- Another paper, from the north room, Photograph 23 (**S25**), was recovered over a white lime wash over plaster. It features a four petal flower outlined in a shiny silver against a beige or ochre background.
- Blank paper, **S23**, collected from the sub-floor of the north room is a lining layer which was commonly used by more affluent households to achieve a superior wall finish over plaster.

## 3.8 End Rooms

The loss of all above-ground masonry of both end rooms limits evaluation of their construction status as in-built rooms at the four corners of the core rooms. At the time of initial investigation in

[27] Phyllis Murphy, pers correspondence August 1997, see Appendix 9.for full text..

1997 the timber framing and ceiling sheets installed by the Paddle renovation masked corner joins between the two verandahs and their respective end room masonry. The removal of these in the intervening years provided an opportunity in 2013 to address the issue of initial house lay-out more effectively. The central question is "was it a wrap-round verandah that was filled in at the ends after initial construction of a three room house or instead were the end rooms incorporated into the core rooms at the time of initial construction of a five room house?" A wrap around verandah in the original house form would require the core rooms to be finished with return corners prior to installation of the end rooms as additions.

All four external corners of the core rooms are visible and posses identical fabric detail, although some bricks are painted and 1950s render covers much of the joins. For this assessment, the southwest corner is used to illustrate fabric relevant to all four. The end masonry of two leaves is broken away in the vertical wall section above the extant ceiling clearly exposing the internal masonry of the loft section of the wall, Photograph 24. A renovation render covers the wall from this point to the floor. A gray render with ashlar lines adheres to the exterior surface of the loft masonry and terminates abruptly at the wall line where it comes in contact with the exposed double brick wall of the south end room. Minute projections of this render turn outwards from this junction suggesting that the render once continued at a right angle to a masonry wall that no longer is present. Similarly some of the brickwork of the common wall projects well beyond the vertical wall line of the verandah, Photograph 25. Mortar is smeared on the vertical faces of many of these exposed bricks, suggesting a continuation of the masonry beyond the vertical wall line of the core rooms. These all indicate that the external leaf above the ceiling of the south room continued past the wall line at the time they were modified in 1950.

The masonry exposed beneath renovation render below the ceilings is confined to narrow strips behind former 20th century timber framing and contains fragmented brick at the corner rather than a full length alternating with a half length brick above the course and below it as would be expected at a finished corner. The bricks next to the renovated corner do not align vertically in the wall but rather are staggered and overlap to different degrees as shown in both photographs. In other words, the renovated corner was not finished as a corner in the original construction of the wall. Photograph 26 illustrates the staggered masonry in another corner of the building in which hard mortar is present between fragmented bricks, suggesting a 20th century repair. Bricks in this wall also do not align to form a corner except in a renovated state. These observations lead to the inescapable conclusion that the walls of both end rooms were fully integrated with their respective core rooms at the time of construction and that masonry extended fully to the wall plate of the loft and to the external walls of the house. The ashlar lines on the exterior of both verandah walls are intended for public view, whereas those on the end walls were interior wall surfaces that were not prepared for public view. Although repaired, the brick alignment and render above the ceiling of these rooms retain features of the surface treatment for Pontville at the time of original construction.

***Photograph 24*** *The bricks of the double leaves of the south end wall seen here above the ceiling timber project beyond the vertical wall and are smeared with mortar on their vertical ends. Darkened ashlar lines are visible in the grey render of the loft wall.*

***Photograph 25*** *The exterior bricks of the double leaf south room seen here from the end room project well beyond the vertical wall at staggered spaces and are covered by render.*

***Photograph 26*** *Seen here is the southwest corner of core rooms showing repair to create a corner in the 1950s. Staggered vertical placement of bricks and the absence of full half bricks at this corner indicate that it is a renovation and was not ever a corner. A "hard" mortar covers this renovation. Scale 20 cm intervals.*

## 3.9 Outline of Nail Making

Nails in Pontville can provide technical clues about the building practices of the day, renovation sequences, global trade links, and in special circumstances to establish a construction date. With the exception of Ewbank nails, current documentation of nail manufacturing chronology in Australian colonial architecture is incomplete and in some respects can be misleading in interpreting a date of construction. Owing to good accessibility of the original fabric and the relatively good state of preservation, an opportunity to carry out and identify all main nail types in construction context made it possible to comment on the history of Pontville. A nail typology based on diagnostic manufacturing marks has been developed here so as to add to a technical description of this very important residential structure. A brief overview of the history of nail manufacture and the nail typology for Pontville is presented at this point to assist in the description of assembly details for this report.

Nail Manufacturing History

Until 1792, nails made in England were forged entirely by hand and mainly in wrought iron. These were cut from rods which were hammered out hot by the blacksmith. In time, a bore was developed to shape the head, thus introducing a process that standardised head morphology and allowed higher production rates. Although this method still produced primitive heads, it initiated a development in mechanisation that resulted in the emergence of nail prototypes that were directly relevant to the Australian colonial market. Australian manufacture did not take place to any significant degree until about 1818, when technical advancements made it possible to make nails faster. Generally speaking, machine-made nails bear marks that can be related to the industrial development for which a chronology can be suggested. Those completely made by hand are of little use for such an investigation because the manufacturing process does not involve a datable evolutionary development.

According to Varman (1980) four main methods have evolved in nail manufacture to produce four nail types employed in the Victorian building industry: wrought or forged nails, cut nails, the drawn wire nail, and cast or moulded nails. Lewis (1989) employs similar terminology to identify four distinct types of nails that differ from those classified by Varman. They are wrought nails, cut brads, machine-made nails, and wire cut nails. Although internal inconsistencies in these terms prevail, the classes distinguished by Lewis are used in this report in a somewhat modified form. The general nail types of the 19th century are reviewed briefly here in their rough chronological order of production, with the cast nail type being ignored. Analysis presented here will show that these categories of manufacturing techniques overlap in the case of Pontville.

Wrought Nails

Hand wrought iron nails were individually forged by a nail maker or smithy from prepared nail stock. With a piece of iron cut to length, a bore was used to shape the head with the hammer. The shank was given its taper and the point its shape by hammering over an anvil. Forged nails may have acquired the shape desired by the smithy, but rarely were any two nails exactly identical in shank or head morphologies. Nails were considered expensive hardware in early colonial construction and therefore were generally sparingly used.

The most comprehensive list of early 19th century English construction nails[28] gives an impression of major manufacturing characteristics of wrought nails being imported from Britain to Australia. The shanks are typically rectangular and taper from the head on all four faces to form either a sharp or chisel point, the shank joining squarely with the head without marks of compression or indentation. In the case of the rose-head, which were the most common head type, head outline is imperfect and the head in section appears comparatively thin and slightly cupped towards the point. Conversely, spikes of this period were made from dies and consequentially were termed “die heads”, which referred to very robust thick wide heads with uniform dimensions across their sections.

Cut Nails

Perfected first by American manufacturers in the late 18th century, the cut nail was sheared from iron plates instead of iron rods by heavy guillotines which cut alternating forms, thus producing a nail to a uniform thickness in one direction and a taper in the other. This was accomplished by turning the plate over at the completion of each cut to repeat the process in rapid succession. If a head was present, it was typically offset to one side to give the nail a distinctive asymmetric profile.

[28] M. E. Weaver & Susan Buggey, ‘A most significant reference document’, *APT Bulletin*, VIII, 3, (1976), pp. 91-118, see also H. Barns & Sons, General (cast) Iron Founders (Birmingham) advertisement for carpenters and builders use, dated 1822.

The earliest American cut nails were being produced in the late 1790s, but it was not until the end of the first decade of the 19th century that machinery was developed to produce cut nails on a commercially competitive scale for world-wide distribution. The cut nail was soon the preferred fastener in softwood frames, floorboards, and cladding in the building trade well into the last quarter of the 19th century because large numbers in various sizes became widely available relatively cheaply. The terminal phase for the use of cuts nails in Australia is difficult to determine however because large stocks were kept long after the nail ceased being manufactured. Luebbers identified it in floor boards at Chinamans Well Eating House[29] in South Australia and Gisborne Mains[30], near Melbourne both of which have firm construction dates of 1857 & 1864 respectively. More recent construction dates to the end of the century throughout Victoria are most likely.

Machine-made Nails

The transition from hand forged nails to machine processing was slow and is characterised by a degree of industrial experimentation the nature of which only recent research is beginning to unravel. The most striking developments appear to have occurred in the specific way both head and shank were being shaped. The shank was pressed on opposing faces to acquire a taper, either from the mid-shank or closer to the head and the points were often slighted rounded chisels or spades. This process typically left a prominent set of ridges along adjacent shank corners in the earlier manufacture, although these subsequently became more subtle with technical improvements related to closer tolerances. Similar methods were used to form the head; the shank was held in a vice at the neck and the head was either hammered or pressed into shape. This resulted in the creation of either crimp marks at the corners of the shank or indentations on one or both opposing faces, or much more commonly, compression marks which in affect rounded the corners of the neck. The marks from head and shank shaping therefore consist of a variety of extrusive spurs, haunches, indentations, striations and tearing of compressed surfaces which easily distinguish the machine-made nail from the hand forged one and machine processes from each other.

Beginning in the mid-1830s, nail production in Britain underwent revisions to meet technical demands presented by Australian hardwoods and the need to clench nails in certain applications. The Ewbank patented machine pressed nail was the most successful response, the earliest ones having crude rose heads and characteristic sharp edges[31] formed along a tapered shank. Mimicking the process of hand manufacture, this machine stretched and shaped the shank with concentric rollers that created a broad wide shank and point and distinctive ridges along both opposing shank corners if two rollers were used. In a classic early Ewbank nail, the neck flares significantly at the head across its width and the shank finishes as a slightly rounded broad point. The first patent for the Ewbank nail was registered by J J Cordes & Co in 1834 and Dos Works of Newport Wales began production two years later, with Australia becoming a significant export market[32] in the next decade. Improvements in clamp design and the use of compression to shape the head lead to a more standardized nail form known as the Ewbank patent pressed type that displayed a prominent star brand on its head for the first time in 1869 (How *ibid*). These characteristically bear compression marks from a vice that held the shank at the head during its formation, the marks resulting in a slight narrowing and rounding of the otherwise square or rectangular shank profile at the neck. Nails from this manufacturer are found in Australian buildings from the late 1830s to about 1870 when they were gradually replaced by the wire drawn iron nails. How[33] describes the case of a hardware merchant in Warrnambool suppling Ewbank nails to the building trade in the 1940s. Ewbank spikes, larger than nails, also persisted well beyond the turn of the century.

The marks made by machinery on this nail have been used as criteria for its identification in Australian buildings. In an edited form, these are as follows.

- Ridges on either side of opposing faces of the nail shank left by the rollers.
- Proportional and even tapering of the shank for the last three-quarters of its length.
- Opposing, slightly cuspate, but essentially flat surfaces, form the vice compression imprint. These are set at a slight convergence towards the underside of the head and finish

[29] 1996a, Luebbers, R. A.
[30] 1995b, Luebbers, R. A.
[31] In this discussion, the term "ridge " or "arras" is used to refer to a raised edge that arises from the shaping of metal as a by-product of a manufacturing process. The term "burr" refers to a raised sharp edge resulting from cutting, as from a shears or drill.
[32] How and Lewis, 2009
[33] How, 2007

with a small 45 degree bevel. The flat surfaces occupy around 20% of the shank length below the head, and the pressed width varies from nail to nail.

- Two non-intersecting shear cuts to the shank end with a fracture join between, creating a spade shaped point.
- One to three transverse, half round indentations across the shank towards the head end, which are the ejection finger marks. These vary in position and are frequently very faint.
- Rounded haunches on each side under the head, which are rarely equal in size as the head is struck off centre more often than not. Nails made around 1880 are more likely to be symmetrical than earlier versions.[34]

Wire Nails

This type of nail represents the culmination of wire manufacture that eventually evolved into the modern varieties. As the name suggests, the shank and head are round and separate mechanical processes are required to produce the head and point. With the advent of continuous lengths of drawn wire as the preferred stock for nail manufacture, mass production was both achievable and affordable. Initial imports to Australia began in 1853, but acceptance by the building trade appears to have been slow. Favourable prices and improved availability by 1870 resulted in a rapid replacement of the hand forged types and cut nails with all types being used in some buildings firmly dated to the mid-1860s during a period of market transition. However a general outline (Varman 1980:108) employed in describing the nail reference collection from Pontville is presented in the following form.

Two main types of wire nails evolved since their Australian introduction in 1853; the rose-head, and the rhomboid-head. The chief distinction between these two types rests in head shape. Within these, several sub-types are distinguished by the marks formed on the shank at the head clamps that produce a series of parallel imprints in the neck. The grippers used in early days advanced on all 4 sides resulting in a square neck under the head, and these are usually referred to as clamps (Nelson 1969, Wells 1998). Head production results in a flaring of the neck under the head that is referred to as a haunch that typically extends to the width of the head. How (pers comm) considers that Australian wire drawn nails made without square necks after ca. 1890 are steel.

The earliest form of the rose-head wire nail features a large, crudely formed and sometimes offset head, a thick shank, a two sided point, and large thick haunches. Heads were often oblong or roughly rectangular in outline. These were common up until 1870, when refinement in die design eventually lead to standardisation in head shape, reduced haunches, and production of four sided points. After this time, well defined rose-head shapes were produced and greater symmetry in both shank and head morphology was achieved. Varman suggests that Types I & II exemplify this evolutionary sequence throughout the remainder of the 19th century. Shank diameter relative to length appears to have decreased in time and improvements yielded symmetry in head shape so that differences between 1860s and 1880s examples can be dated. The developmental chronology for wire nails is nevertheless difficult to accurately detail with the available evidence owing to poorly dated examples and a myriad of different manufacturing marks.

The rhomboid head is distinctly block-like in profile and exhibits multi-facets around the head, giving it a clearly different appearance from the rose-head nail. The history of development is not well defined by Varman and more historical research is required to date the significance of these differences. The earliest head form may have been rather more squat and broader than its successors, but the trend seems to be towards a round bulbous shape with a decreasing number of facets. The earliest rhomboid head type first appeared in the 1880s with heads being often off-set or irregular in shape and these were superseded by the more standardised bulbous forms in the 1890s.

Bullet Head

While not specifically described by Varman or any other researcher because it entered the market in 1887 (How pers comm June 2014), the bullet head nail was used at Pontville and most likely evolved from the rhomboid head type. The bullet head in its modern form (post-1950) has a round, non-faceted round head that is bulbous and curved around the body and flat on top. The point is four sided and the neck is only slightly roughened by way of raised crimp marks.

If there is a possible evolutionary sequence of the bullet head nail, it is likely to have been a general reduction of the head-to-shank diameter ratio and possibly a general reduction in the overall

[34] *ibid*, p ?

diameter of the nail through time for a given length. Bullet head nails are made from steel and in the case of Pontville are confined to renovations after 1900.

## 3.10 Nails at Pontville

The nail types recovered from Pontville fabric are illustrated here both as a group, Photograph 28, and as individual examples to provide greater detail to this discussion. These are associated with the initial construction of the homestead and its renovations during the Newman tenure of the 19th century. All nails and their images from Pontville appear in Appendix 6. A brief summary of these is as follows:-

### 3.10.1 Machine-made Nails

Machine-made, Type1, Ewbank pressed nail, 1836 - 1869

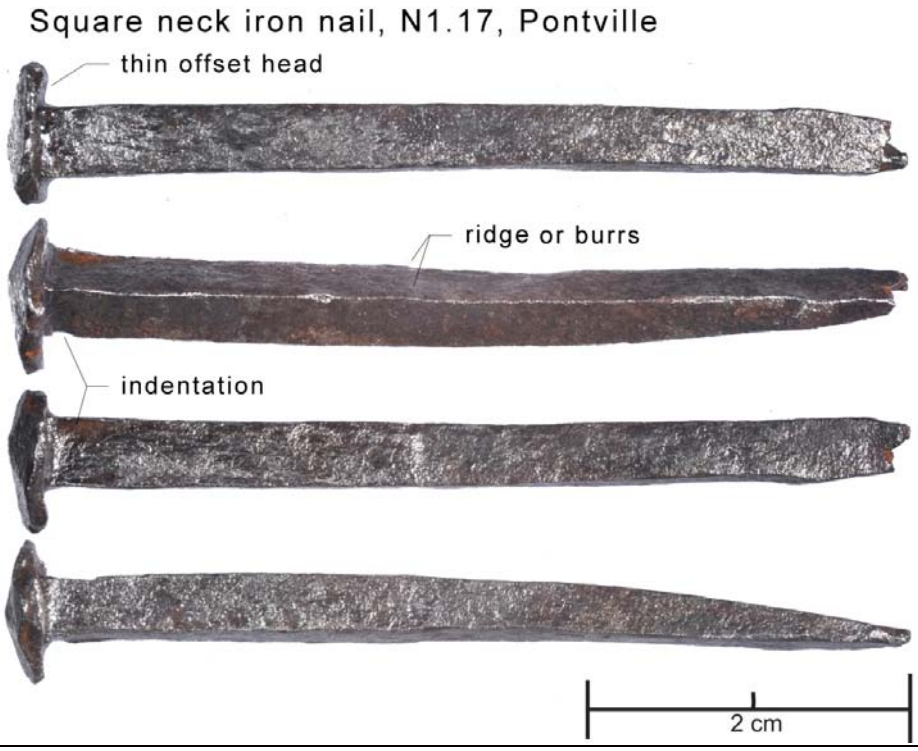
There are several nail types in the Pontville assemblage that are made by machine pressing, including the Ewbank patented nail as well as variants that are clearly not manufactured by a Ewbank machine and most probably are not fully machine made. The Ewbank pressed patented nails, Photograph 27, are represented either by a 2 inch specimen, Photograph 28c, or by others which conform to this style but may not possess ridges on both opposing shank faces. The characteristic flaring of the shank at the neck and compression marks under the head, linear surface striations in the taper, and compact head shape identify the machine processing of this nail type. The Ewbank nail has been recovered attached to pit-sawn timber elements of a former roof and in floor boards of the loft. It is believed to be used in installation of the slate roof in the period 1853-55, but an earlier use cannot be ruled out due to the absence of *in situ* fabric with this nail in a fastening position. The Ewbank nail here is a **Type 1** machine made nail.


***Photograph 27*** *A classic Ewbank patented nail from a Pontville roof timber, Type 1 machine made.*

Machine-made, Type 2, Square neck pre-profiled cut nail, 1844 -1845

A second machine made nail, Type 2, Photographs 28a & b, & 29, exhibits the sharp ridges and pronounced taper of the classic Ewbank nail, but the shank joins the head squarely without haunches and has indentations rather than compression marks from a toothed vice employed to form the head. There are no visible surface striations to suggest either a guillotine or roller. The head is irregularly round, has a thin cuspate section, and irregular facets. The head may have been completed as a separate operation, including hand-made. This nail is an early machine assisted nail type in which parallel cuts were made from a pre-profiled plate with the heading most probably created in a separate operation (How pers comm, 2007). This nail was in use in the late 1830s but its manufacturing history or appearance in Australian fabric has not been researched. This is the only nail type used in original hardwood pit sawn rafters and cross-ties at Pontville where an original construction context is confirmed from fabric analysis.


***Photograph 28*** *Collage of paired images showing face and side views of nails from Pontville fabric. (**a & b**) 2 inch square neck **Type 2; (c)** 2 inch Ewbank, **Type 1** ; (**d**) 2½ machine pressed and cut, **Type 3**: (**e**), 2 ½ inch machine made, **Type 2; (f),** hand -made rose head with four sided taper, **Type 4**; (**g**),cut sheet flooring nail, cut brad; (**h**) round headed wire lathing tack; (**i & j**) three sided lathing tack, **Type 1**; (**k-m**) hand-made cabinet maker brads; (**n-o**) zinc alloy roofing clout, **Types 1 & 2**; with detail of extrusive projection from clamp under head.*




***Photograph 29*** *Square neck pre-profiled cut nail Type 2 machine-made.*

Machine-made, Type 3 Square neck cut nail, 1844 - 1845

This wrought nail type, Figure 28d & Photograph 30, has a square shank that tapers on one face from the last one third of the shank and joins the head squarely without a flare or marks of compression. A single rectangular indentation and a minor one on the opposing face are always present hard against the head, these marks made by the grip during heading. This indentation is sometimes off-centre but where centred it does not extend the width of the shank and it commonly exhibits sharp corners at the indentation in unweathered specimens. The floor of the indentation is sometimes a wide "U' shaped section across the shank or it can be "V" shaped. The shank section is slightly cuspate and possesses slight ridges or burrs on the corner of one single face. There is no axial rotation that is associated with a cutting shears and the surface of the nail is too eroded to identify either roller or cutter striations. The head is crudely formed with four facets, is most often offset, and exhibits a thin section that cups somewhat towards the point. The point is shovel-shaped and the shaft bears irregular surface contours.

This nail was used to attach trimmer strips to built up naturally irregular expanses of the lower edges of the ceiling joist to facilitate level, more even lathwork, as drawn in Figure 7. This nail type is found strictly in a construction context at Pontville and is believed to be the first of its type to be recorded in Victoria.

A second example of this nail, Photograph 31, illustrates the variation in similar manufacturing marks. It is taken from a trimmer stripe in the lath and plaster ceiling, south room.

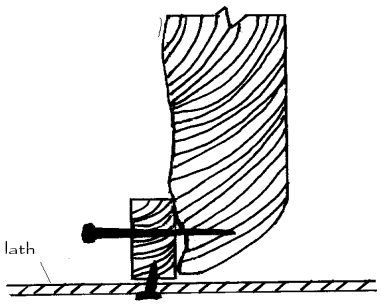
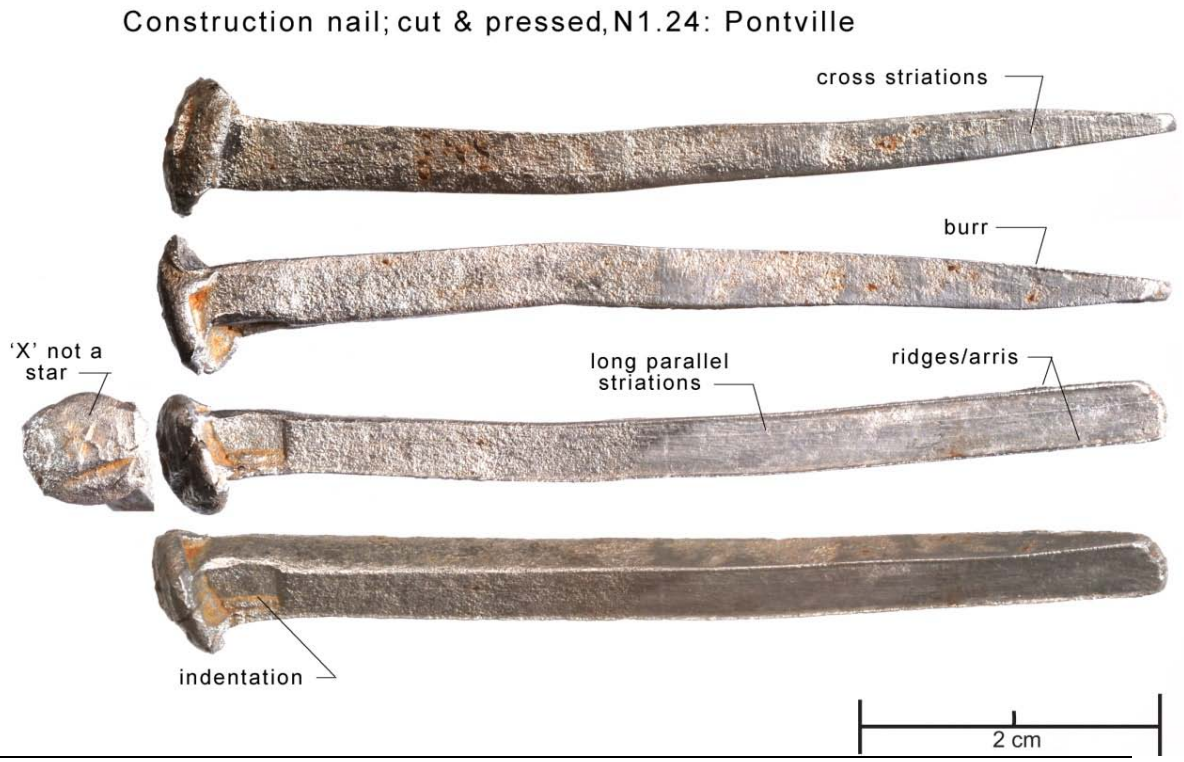
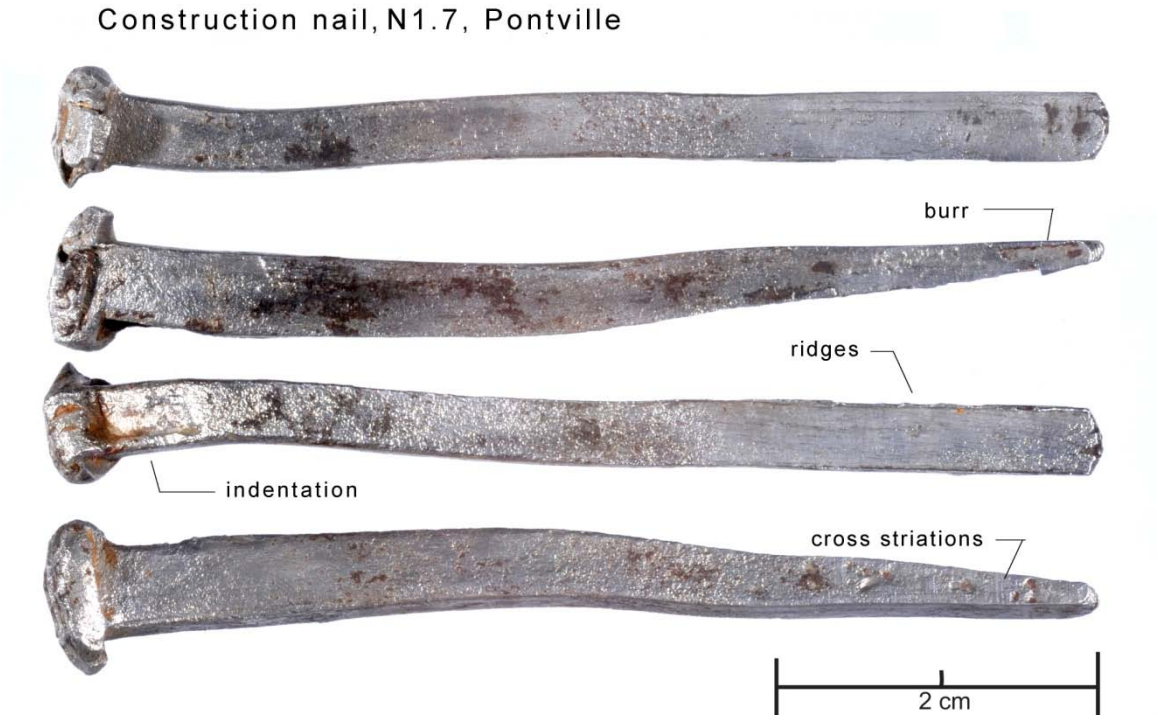



***Figure 7*** *Assembly detail in section of Pontville ceiling joist and trimmer strip attached with machine-made square neck Type 3 machine-made nail.*




***Photograph 30*** *Cut and rolled Type 3 machine-made nail from Pontville ceiling, mark (inset), 1844-1845.*



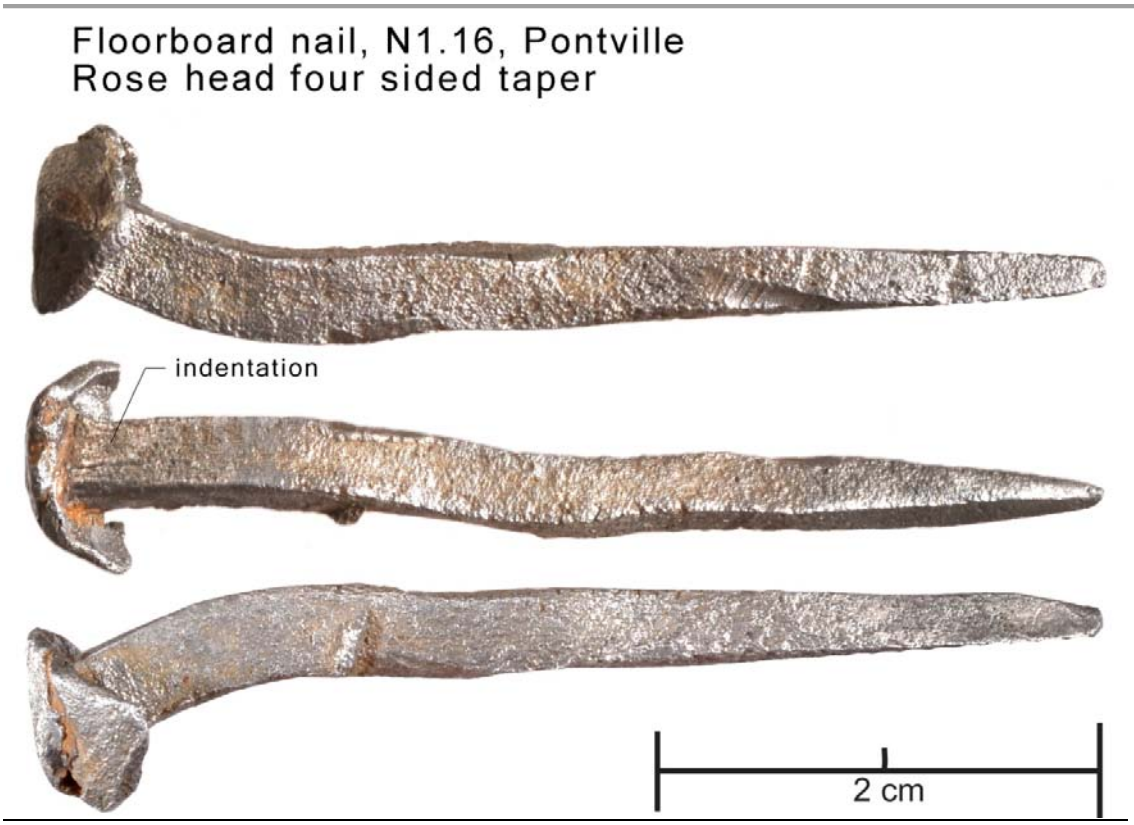

***Photograph 31*** *Cut and rolled Type 3 machine made nail from Pontville ceiling, 1844-45*

The short taper of this nail type, the square section of the shank at the mid-way point, and the head shape distinguish this nail from the Ewbank manufacturing process. However the presences of a pair of ridges on one face suggests it was rolled to gain the taper and hence acquire a slight cupping of the side faces. If these ridges are the burrs left by a cutting shears, the nail is probably cut from a pre-formed sheet that contained the required taper. Loose specimens are recovered from the site (loft) both unused and discarded by renovation. Unlike the Ewbank, the head of this nail is oblong, robust

in section, and does not exhibit the classic rose-head faceting that is present in both the Ewbank and the Type 1 square neck nail described above. This nail has 20-30% more metal than a Ewbank of a similar length.

Present in the assemblage in low numbers, this nail was found *in situ* in trimmer stripes on the lower edge of the ceiling joists associated with installation of a lath and plaster ceiling. Accordingly it is an exact contemporary of ceiling installation at the time of original construction date of 1843 -1844.

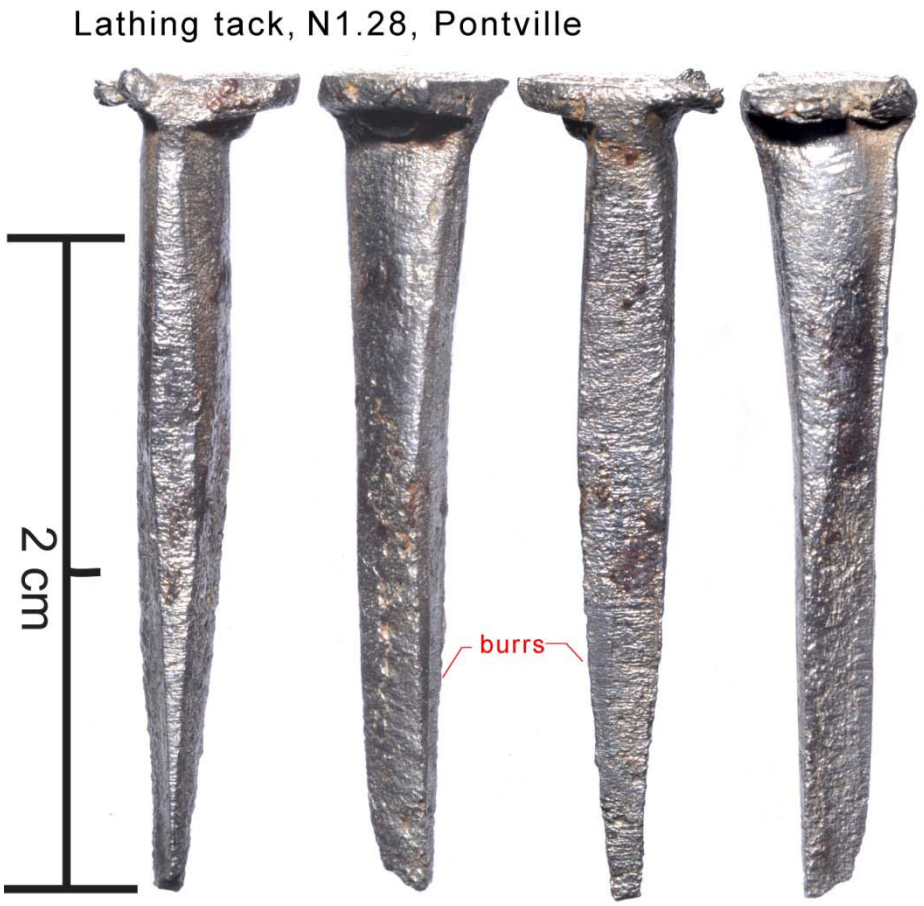
*Type 4 Square neck cut nail, the Rose Head with four sided taper, 1830-1840s*
Another square shank nail in Pontville is the rose head double taper, Photographs 28f & 31. It is tapered on four sides 3/4 the length of the shank and displays distinct cupping of a roughly round head, in this instance the shank joins the head without a haunch but a single shallow indentation from the grip is present in the neck, shown. This specimen was removed from the upper edge of a ceiling joist in the loft, where it most probably fastened a floor board - but is not believed to be common in the nail assemblage. In this context in the loft, this nail cannot be assigned an installation date. It is known in the British market in the 1830 -1840s.




***Photograph 32*** *Rose head machine-assisted, square neck Type 4, Pontville loft floorboard.*

### *3.10.2 Machine Made, Lathing Tacks*

*Type 1*
Two lathing tack types were recovered from both the ceiling joists of the Pontville house and loose from the floor cavity. Type 1, Photograph 33, is a one inch nail with a wedge-shaped burred shank and a diagonal taper in the last 1/3 of the shank length, producing a very sharp three sided point resembling a boot maker's tack. A flare extends to the edge of an oblong flat head at the neck, and the shank before the flare exhibits an irregular four sided profile. Extraction damage obscures a full identification in some examples. A cutting shears was used to make this nail type and the head most probably is handmade as a separate operation. Examples of this tack are illustrated in Photograph 28i & j. This nail is found extensively *in situ* the underside edge of the ceiling joists in the south room where visible and loose in the subfloor cavity, sometimes apparently unused and is considered an exact contemporary of the installation of lath and plaster in the homestead. This tack is on display in the Sydney Museum gallery as taken from cottages from the Rocks with a date of 1827 and How (email pers comm 2013) has recorded a similar nail from the NSW Supreme Court House with a date of 1825 and identical tacks in the Woolmers' Female Convicts Quarters that were used in 1844.




***Photograph 33*** *Lath tack from Pontville ceiling joist with manufacture marks, Type 1. Installed in 1843-44*

*Type 2*

The second lathing tack, **Type 1b** in Photograph 28h, is also 1 inch long is an iron drawn wire nail, but has a round or oval tapered shank in the extant examples recovered and an offset round flat head. The shank meets the head squarely without indentation or flare and the point appears to have been originally sharp although extreme oxidation has distorted the original shape of this nail type. A single example of this tack is illustrated in Photograph 28h, although numerous examples were recovered. A single example of it was found lodged in the underside of a ceiling joist and numerous others were found loose in the subfloor cavity. It is believed to have been used to secure a second ceiling material, the nature of which is presumed to be timber.

### 3.10.3 Machine Made Nails, Roofing Clouts

The roofing clout at Pontville also has been recovered *in situ* in dislodged timber battens and loose from loft spaces, and sub-floor deposits. Two forms are present.

***Type 1****, Zinc Alloy*

By far the most common clout, Photographs 28n and 34, is made from zinc[35] alloy, the head and shank being manufactured in one piece two inches long. The shank is made from rectangular nail stock which has been sheared diagonally mid-way from the head to create the taper and the head has been pressed in a vice to achieve a flat thin cross-section with distinct extrusion spurs running fully to the edge of the head, detail Photograph 28n. Slight compression marks on the shank indicate the presence of the vice that are closely resemble those of the Ewbank. Both used and unused examples have been recovered and this nail is universally well preserved. The nail was recovered from short lengths of softwood battens in the loft, in the loft and many were been the floor.

[35] The composition of this nail has been determined empirically as 99% zinc and 1.0 % iron (How pers comm March 2014).


**Photograph 34** *Zinc alloy roofing clout , Type 1, from Pontville shingle and slate roofs, 1843 -1855*

*Type 2 zinc alloy*
The second type of zinc roofing clout is a sub-species of the first in that it has a slightly less robust shank, a thicker but smaller head, and is a slighter form of the first type, Photograph 28o. Otherwise, the manufacture of the two types is identical. There are no patent marks visible on any of the clout specimens and this type is less common in the assemblage as a whole. This type is referred to as Zinc alloy Type 2.

The question of the precise use of the roofing clouts at Pontville was raised with the discovery of both roofing slates and fragments of timber shingles embedded in crevasses in the loft. The larger clout, Type 1, was attached to battens which could have supported either roof fabric. A microscopic examination of all clouts located a minute fragment of purple coloured slate attached to the shank of one nail in the correct position of application. Thus it can be certain that the Type 1 clout was used to fasten slates at Pontville. The smaller clout, Type 2, exactly fits the nail hole in one of the shingle fragments, whereas the larger clout does so only with considerable force. Although this is circumstantial evidence that there may have been separate functions for these two nail types, obviously both nails were generally well suited for fastening both shingles and slates and there are no other candidates for this function in the assemblage. This nail type accordingly is likely to have been used in the original construction in 1843-44 and in the early 1850s roof renovation.

*Type 3 Lead Headed Corrugated Iron Clout*
This iron clout was used to install the first roofing iron of the detached kitchen at Pontville, identified as Gospel Oak. It is a solid, domed-shaped lead washer, Photograph 35, with a wire drawn shank inserted at the time of manufacture. The shank has a square neck, a rhomboid head with four facets and the point has four faces that define a sharp tip. There are no traces of a brand mark on the head. This nail was used in the initial construction of the Pontville detached kitchen in the period 1882-1903.

All available British patent registrations was searched to identify the origins of this nail without success. These documents illustrate heads in various shapes with cupped basal surfaces and, typically, with hollow recesses in the head to ensure an effective seal with the roofing corrugation at the time of installation. The lead headed nail as described in these registrations are all manufactured in the 19th century. This nail type has no ability to be shaped since it is solid, except that a small amount of lead forms a sleeve around the neck of the shank that use marks indicate does seal against the hole made by the shank in the iron. This nail is believed to be an Australian product made in the late 19th century.

The Emu Best corrugated iron roof on the house was installed with a 2" galvanised nail with a cupped washer head. This closely resembles most other 20th century types and cannot be dated with the available information. This nail has also been used to fix loose sheets on the detached kitchen, and is the primary fixing nail on the Orb Lysaght (Australian) corrugated iron on the dairy.


***Photograph 35*** *Lead headed roofing clout from detached kitchen with two views of the wire shank.*

### 3.10.4 Cabinet-maker's Brads

The cabinet-maker's nails at Newman's Pontville take two shapes: Type 1) tapered on all faces throughout the length of a square shank to form a sharp point, and Type 2) a cut nail with tapering on opposing faces and parallel on the other opposing faces, with a spade point. Both types have a vestigial head comprising a slight projection to one or two sides that may be a modification of a existing head. Irregularities in shank dimension of Type 1 suggests that it was hand forged, possibly beginning as a cut nail prototype. The narrow profile of these brads is presumably designed to minimise both splitting and show of the nail on the surface of the finished work. Examples of brad were recovered from spacer strips and moulding on window surrounds and architraves in the house, Photograph 28k - m. The antiquity of this nail cannot be determined, but it is likely that the additional processing for this nail was phased out of house construction with the introduction of wire nails in the 1870s. Fabric assessment suggests that these brads were used in Pontville at the time of original construction and accordingly were installed in the early-1840s.

### 3.10.5 Wire Nails

Disregarding differences in size, the distinguishing characteristics of the wire nails collected from the Pontville homestead and detached kitchen, Figure 8, result from the head shaping operations during manufacture. All heads in the assemblage are somewhat pointed and four-faced rose-head profile, have a single pair of small extrusion spurs beneath the head, and a four sided point. Head outlines tend to be squarish rather than round but are generally crudely made, and considerable diameter-to-length ratio variation has been observed between individuals in a size class. Unlike the machine-pressed nails described above, the wire nails appear to be made by the same manufacturing techniques, hence machine marks throughout the assemblage are very similar. Nails on the framing and timber weather boards of the detached kitchen are all wire drawn and exhibit square necks that are indications they are iron rather than steel manufacture.

The largest nail, a 3 inch rose-head nail, Figure 8a, was removed from *in situ* from hardwood noggings and rafters of the kitchen and is therefore an exact contemporary of construction. This nail is characterised by a high, irregularly shaped, four sided rose-head, with two extrusive spurs beneath the head, and a four sided point. The comparatively high shank-to-head diameter ratio gives this nail a distinctive robust appearance that is common in earlier forms of manufacture. Two inch wire nails, Figure 8e & f, with two rose head shapes, one high with four faces, the other a nearly flat profile

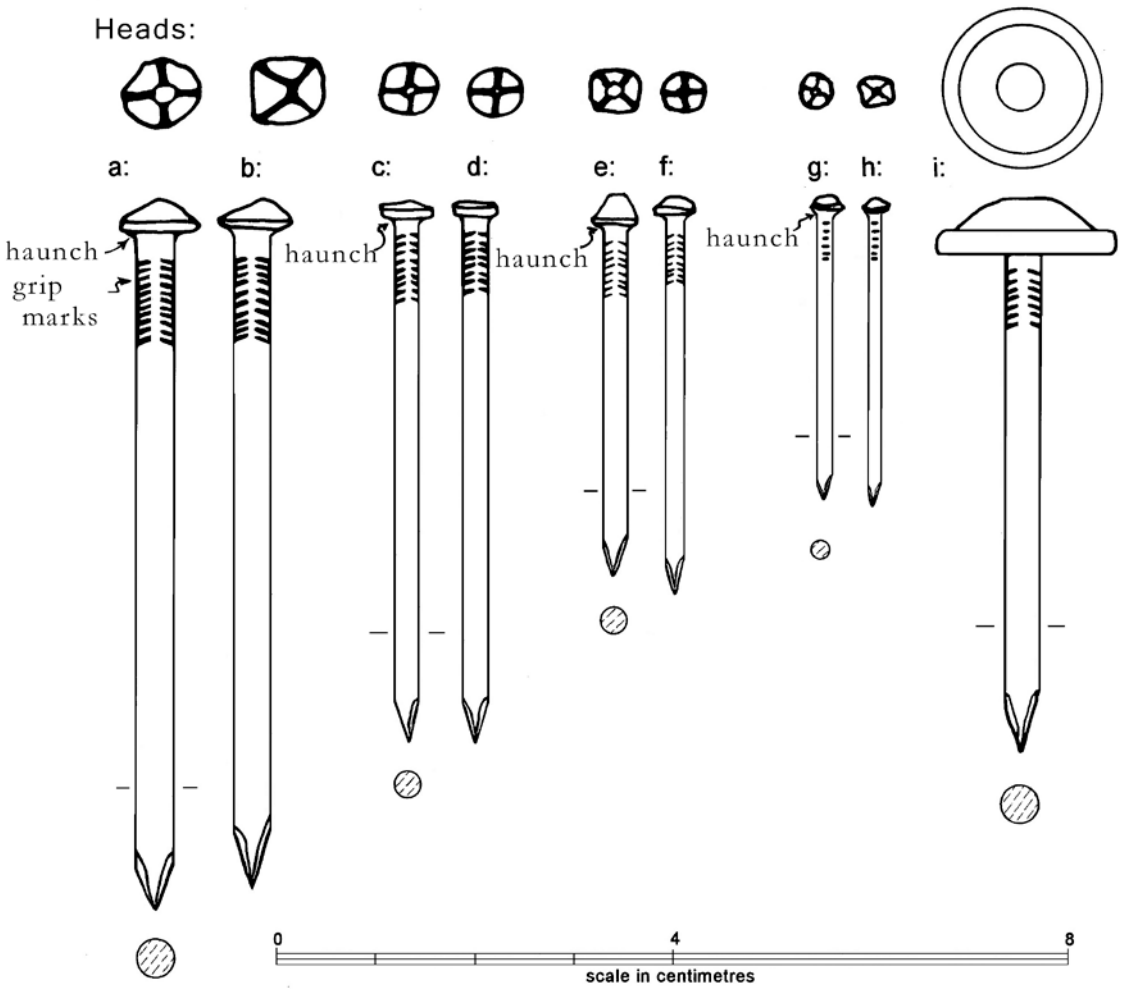



***Figure 8*** *Wiredrawn rose-head construction nails from Pontville detached kitchen. From left to right:* ***a & b****; 3 inch from kitchen frame;* ***c & d****, 2 inch exterior kitchen cladding and dairy ;* ***e & f****, 2 inch kitchen cladding, interior,* ***g & h****, 1¼ inch brads, timber ceiling, homestead;* ***i;*** *lead headed roofing nail, kitchen corrugated iron roof.*

were removed from the interior timber cladding of the kitchen. Two inch wire nails removed from the exterior kitchen cladding closely resemble the flatter profile heads mentioned above and appear to be simply larger examples. Two types of wire nails were used to fasten the extant rafters in the house to the wall plate:- a flat head rhomboid 3 inch nail, and a 2 inch flat profile rose-head. The size of the latter suggests that it was used as a fixing rather than a fastening nail.

The identification of a definitive manufacturing period for wire nails is made difficult by a paucity of reference nails with firmly dated architectural contexts. Employing Varman's generalised chronology, it is clear that the rose-head nails associated with kitchen construction are most likely to be the later forms introduced into the Australian building trade after c.1870 and that the cladding nail is somewhat later still, possibly in the 1890s.

The roofing clout used to attach the corrugated iron sheets of the kitchen is in fact a 2 inch wire nail to which a thick heavy lead washer has been formed at the head to ensure a weather seal. Patented marks could not be identified in any of the examples.

Bullet Head Nails

The extant timber floors of the homestead is constructed with modern 2½ inch bullet head nails which are driven straight into hardwood joists without being set. Heavier nails were used to fix joists with the timber stumps but none of these nails were removed for examination.

Roofing Nails

See Type 3 roofing clout above.

## 3.11 Detached Kitchen

The detached kitchen at the commencement of this investigation, Photograph 36 & 37, was a derelict skeleton of the former structure – major elements were missing from the frame and floor, and a majority of internal lining and roofing iron had been removed, including almost all subfloor support structure. Remnants of timber lining were present in the upper reaches of the divider wall and ceiling. The vertical timber frame elements are supported by steel droppers as a rescue measure and some are free swinging without attachment to lower frame elements. The remnants of a built-in cabinet is present in the northwest corner and presumably similar storage was incorporated on the opposite side of the chimney, as can be confirmed by earlier photographic coverage.

The frame of the kitchen is cut slightly into sloping ground, with its southern long wall supported below yard level and its opposing long wall standing well above it. Demolition debris, *in situ* water pipes, and frame fragments are strewn across the bare earth below the former floor boards.

A close inspection of the CI roofing sheets identified the following-

- There are no empty nail holes to suggest the sheeting is second hand.
- Roofing nails with lead heads and wire drawn shanks were used to attach CI sheets.
- The manufacturer's mark on the sheets of Gospel Oak is illustrated in Photograph 38, and described by Lewis (1994).

At the time of the field investigation, the kitchen fabric was in grave state of disrepair and the structure was at risk of being blow over by wind gusts. Accordingly care was taken to ensure that staff were not placed in danger or that works undertaken did not destabilize the fabric without assistance of an additional rehabilitation budget.

The investigation ensuing from the fabric analysis sought to determine whether or not additional fabric remained from the extant detached kitchen or from an earlier kitchen beneath it.

***Photograph 36*** *The detached kitchen in 27 May 1997 at the start of this project.*

***Photograph 37*** *The kitchen in the early 1990s well after abandonment, with some evidence of vandalism. The horizontal stripe over the doors may relate to a skillion roof, as observed by G. Hawthorne.*


***Photograph 38*** *This brand of Gospel Oak was recorded on galvanized roofing sheets to the kitchen.*

## 3.12 Outbuilding, "The dairy"

The dairy survives as remnants of a timber framed 8 x 10 foot shed overlying concrete floors of the milking area and a second curved corrugated iron roof that rests over the edge of the concrete yard without walls, Photograph 39. A derelict refrigeration unit and steel rails mark the animal enclosure area and a brick roofed circular water tank is located just outside one corner of the former yarding area. One of the concrete slabs is identified by George Hawthorne as the one he helped pour in 1938-40 and water for cleaning and washing was pumped from the nearby brick water tank.

*Flat CI Sheeting*

The Lysaght name is printed on the steel sheets in blue over an orb image surmounted with a Maltese Cross with the name "Australia" below it. John Lysaght Limited of England registered this brand and cross in Western Australia in 1887[36] and the sheets became the most popular choice for roofing in Australia throughout the early 20th century. Galvanized roofing nails with cupped washers are used to fasten the sheets to timber battens. Two manufacturing prints are present in the curved sheeting seen here for the dairy: Lysaght name over Orb symbol set over a Maltese Cross and the

[36] Miles Lewis, Metals: corrugated iron, 06:8.04.20

word "Australia" printed straight across its base, and the number "24 G" set out further below, with the number "5" printed inside the left hand branch of the cross: and the other mark in blue "TECT-A-1A for Longer Tanks " and the number 55 set inside a star of David, Photograph 39b & c.

***Photograph 39a*** *Shown here are the remains of a timber shed and concrete platform and dome- roofed brick water tank of the Pontville dairy and equipment storage shed, described by George Hawthorne, Section 2.4 above. Photographed 1997.*

*Timber Elements*

Mortise and tenon joints for wall frames. *In situ* nails are wire drawn with rhomboid heads. T&G hardwood floor boards fastened with wire drawn nails.

*Masonry Water Tank*

A round underground water tank with Glen Iris bricks of unknown depth. Dimensions of this structure were not recorded.

*Curved CI Roof*

This structure with curved corrugated iron and attached framework covered in canvas seems to be an equipment storage and milking shed. The timber dairy may be seen on the extreme right of the photograph.

***Photograph 39c*** *March 2014. No date. Manufacturers mark on CI sheet.*

***Photograph 39b*** *Dairy shed at Pontville with backhoe. Courtesy Carl B Newman Webster*, no date.

## 3.13 Pontville Bricks

Five bricks are recovered from Pontville masonry, Photograph 40. The first (220 x 110 x 62 mm) is a made in a slop mould without a frog in a generally uniform pale orange colour, although some examples in the loft are considerably darker on one edge from uneven firing in the kiln. A linear hack mark in the form of a raised bulge runs the length of the stretcher or long face and there are no other manufacturing marks. A dry pressed red brick (230 x 110 x 75 mm) with the name "Northcote" embossed twice on a single frog is manufactured by the Northcote Brick Company beginning in 1882 (Lemon 1983 ) as the second brick type at the homestead. This company began operating in pits in 1873 trading as the Northcote Patent Brick Company but the firm introduced the Hoffman kiln in 1882[37] and this brick most likely was used to construct the kitchen after this date. All of the fireplace and chimney in the detached kitchen is made from this brick, as are some spoon drains, and a footing of a small structure south east of the homestead discussed below. The third brick (no measurements taken) is a red dry pressed brick with the name "Clifton" embossed on the frog, manufactured by the Clifton Brick Company. Although the early production dates for the Clifton Brick Company in ca 1890-1910 was erratic, it is believed to have become more viable after ca 1930 (Carroll & Rule 1985, Clifton Brick Company 1935). The underground water tank at the Pontville dairy incorporates this brick throughout its above ground fabric. The fourth brick (235 x 115 x 80 mm) is another red dry pressed brick with the name "Glen Iris" stamped in raised letters across the frog. This company started brick production in 1913[38] at a Thornbury clay pit after amalgamating with other manufacturers. It is incorporated in the renovation fabrics at Pontville attributed to the upgrade undertaken by Leslie Paddle after his purchase in ca 1950. The fifth brick type (**S10**, fragment) is exceedingly rare in the assemblage and remains somewhat of a mystery. It is a hand-made undersized off-white brick about 45 mm thick with a fine texture paste that is not uniformly mixed as viewed in fragments. All surfaces are slightly undulating and it does not possess sharp corners. It is present in small numbers in the firebox (repaired?) of the central room, the footing to one hearth stone, and was found under the floor in the north room. Its position in the construction history of Pontville has not been established by this study, but it certainly belongs to early fabric in the building and may have been intended as a firebrick in the fireplace.


***Photograph 40*** *These are the five types of bricks found at Pontville. The orange brick, upper right is the hand-made Pontville brick and the white cream coloured brick on the left is also hand-made and was incorporated in the Pontville original construction. Scale in centimetres.*

[37] Ian Stewart describes the role of Hoffmans in the Victorian industry, see Miles Lewis 1996:.
[38] Ian Stewart 1987:38, Lemon 1983: 147.

# 4 ARCHAEOLOGY OF PONTVILLE

## 4.1 Introduction

The archaeological investigation at Pontville aims to determine whether or not the proposed stabilisation program will adversely impact on the homestead associated with the Newman tenure, spanning the period ca. 1840 to 1906. The fabric analysis presented in the preceding section has assessed fabric, including that on spaces and surfaces in the homestead, so as to identify the nature and significance of materials in the extant site that may be impacted. The archaeological investigation will be guided by indications of the likely origin and significance provided by the fabric analysis where assembly context can be reconstructed.

## 4.2 Datum Point

A datum point consisting of a brass bolt embedded in concrete was established at the eastern boundary of the security fence near the entry gate, Figure 3. This datum was used as the permanent survey reference point throughout the excavation described in this report, but has not been related to AHD, or any other reference point outside the compound.

## 4.3 Excavation Process

Excavation trenches were located to clarify fabric relationships in structure that otherwise were not visible on the surface, Figure 9. These included the footings of the kitchen and homestead where exposure was possible without altering or removing existing *in situ* fabric. In some limited instances, removal of fabric was required in order to examine earlier structure. Areas around the house, especially to the rear and south garden were examined with a steel soil probe that is designed to recover soil samples by pushing it into the ground systematically to retrieve continuous sections of sediment. This procedure is capable of detecting compaction changes and harder objects below the ground surface rapidly and with a minimum of disturbance. Where exposure was required to identify buried fabric, the excavation terminated once the extent of the fabric could be described. Those structures, identified by historic records or testimony included a toilet, a chicken coop, paths, an underground water tank and various above ground water tanks. None of these features were visible in 1997 but only a fraction of the total area was comprehensively probed due to high soil compaction and the presence of rubble and other obstacles beneath the surface.

Excavation of Pontville buildings was conducted in seven trenches exclusively within the security fence, to the extent identified in consents issued by state authorities, Appendices 2 & 3. The kitchen structure remained in a precarious state of collapse from strong wind gusts and in the absence of a rehabilitation budget, destructive investigation was undertaken cautiously wherever possible or was avoided altogether. The following sections presents an identification of the fabric uncovered and offers a statement of significance to this study.

## 4.4 Trench 1 & 2, Delineating the Detached Kitchen

Trenches 1 & 2 were excavated to examine interior deposits and structure of the kitchen and any evidence of earlier fabric, Photograph 41. Demolition debris is strewn over the sub-floor surface at the start of works included food and animal bone, wood off-cuts, gravel, wood fragments from the timber structure, metal tins, broken glass drink bottles, and a mixture of concrete and brick fragments, metal pipes, and paper wrappings. The historical significance of most of this material could not be evaluated without considerably more detailed research but where dates could be assigned from simple inspection were contemporaneous with the 20th century habitation. Except where specified in the artefact inventory, Appendix 7, this material was considered too fragmented or decayed to warrant further study. A single stump and no other floor fabric remained inside the building.

### 4.4.1 Trench 1

Measuring 1 x 4 m and divided into four one metre squares, this trench exposed the fireplace footing inside the structure and associated sub-floor area in room 1 of the detached kitchen, Figure 8 Photograph 42 & 43. Squares 1 and 3 &4 were each excavated in three layers, exposing artefact sterile clay in each case at the base. Square 2 encompassed extensively disturbed sediment and was ignored.

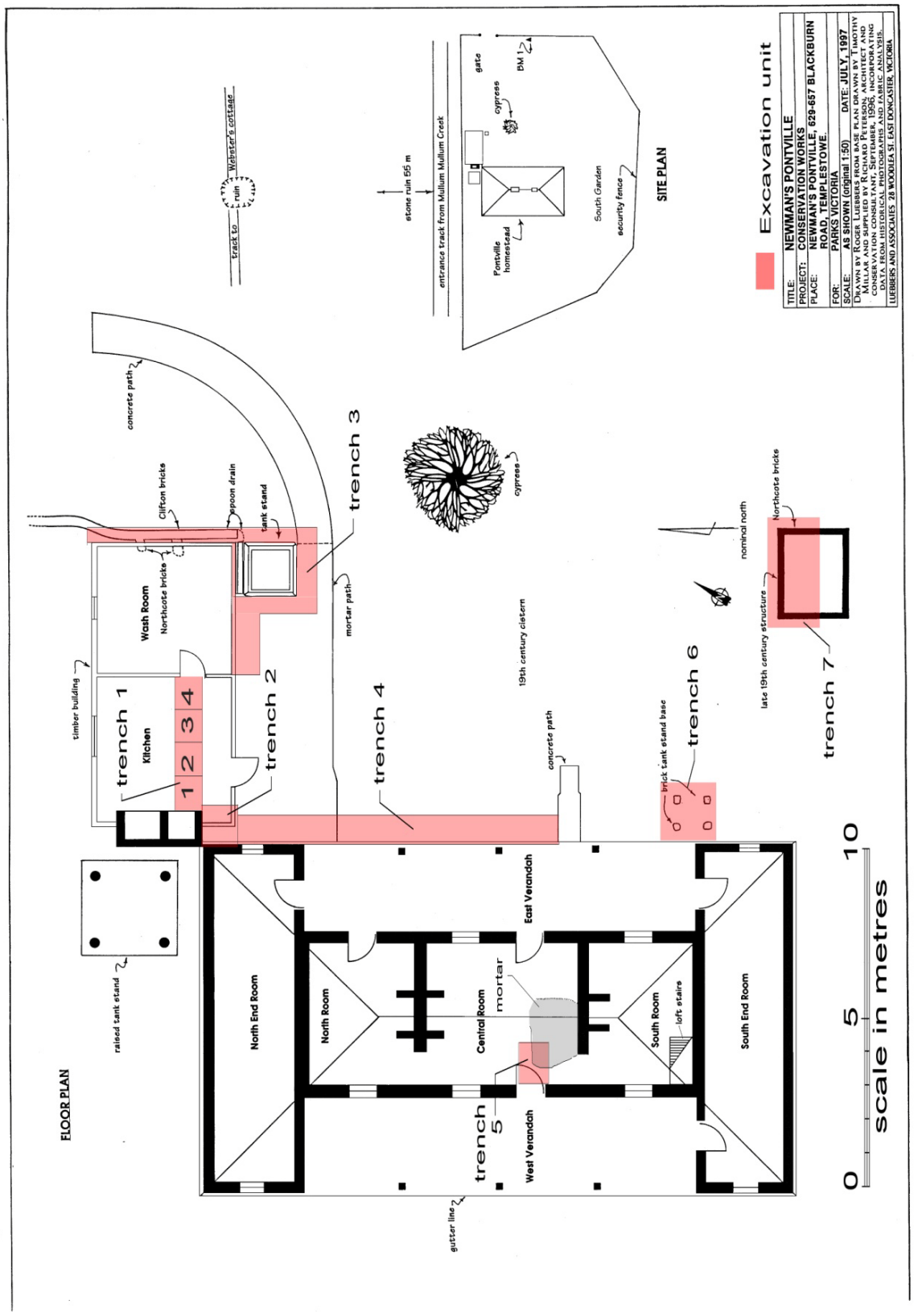



***Figure 9*** *Plan of excavations units undertaken to examine sub-surface fabric at Pontville.*

The results of this investigation are the following.

- No structural elements of the extant framework or former structures were detected.
- Significant disturbance has occurred from animal burrowing across the entire footprint of the building. Surface runoff, possibly accelerated by failed gutter and surface drains, is widely evident. Rabbits and dogs are the principal culprits. Noticeable infilling of burrows by rubbish, possibly aided by water transport but including deliberate human disposal is indicated.
- The stone footing to the chimney is composed of a pad of selected flat sandstone blocks which are joined by mortar (**S4**) in tight fitting arrangement. This stone lies on a compact bed of small rock rubble containing fines that may include lime. No lower infill was detected.

### 4.4.2 Trench 2

Measuring 1.0 x 01.5 m this trench is positioned at the SW corner of the detached kitchen to expose the chimney base, the homestead footing of the north end room, and a concrete slab to show relationships to the homestead footing and to identify earlier fabric, Photograph 44. This trench is located at the closest junction between the two buildings where renovations to form the dwarf wall in the 1950s resulted in the abandonment of the original stone footings of the homestead, Photograph 46. Units 1-10 were removed separately as subdivisions of this 1.5 metre square trench. These were not superimposed sedimentary units but were considered individual depositional features across the trench floor, see excavation notes in project files. A concrete slab abutting the end wall and associated with the 1950 renovation was removed to further examine the stone footing at the corner of the house. Unit 8 is wall rubble ending level of the footing base and Unit 9 is a solid clay unit beneath the footing.

### 4.4.3 Observations

- A slab of concrete ca. 40 mm thick abuts the verandah masonry and extends to a point just beyond the gutter drip line from the house corner to the steps entering the north end room. It slopes slightly away from the house covering the former house footing. It could be intended as a footpath between kitchen and house but its narrow width makes this interpretation less likely. It more likely is intended to shed water away from the house towards surface drains along the adjacent south wall of the kitchen. Their failure, as shown in Trench 3, may explain excess surface run off beneath the kitchen and hence significant erosion and the transport of materials under the kitchen floor. Fragments of roofing slates were found immediately below the underside of the slab when it was removed (see project collection).
- Three large stones of that footing, constituting the NE corner of the house, are exposed in Trench 2 and are *in situ*, each with a thin layer of render on their vertical faces, Photograph 47. This render also continues across the horizontal upper face of each stone, although the corner stone is considerably higher than the other two and demolition damage has removed some mortar on all three stones. The render clearly continues behind the brick work of the chimney, but it has not been possible to determine whether or not it also continues behind the stone footing of the chimney below the brickwork. If it does continue, then both the render and the chimney footing are younger than the house footing. If it does not, then the chimney footing may have been present when the render was applied and the two footing may be contemporaneous, although their height differences makes this less likely. Regardless of the correct explanation, the chimney brickwork clearly is younger than the house footing against which it abuts. The function of the render on these three stones is unclear.
- The chimney stone footing abuts hard with the stone footing of the house, overlapping approximately 4 centimetres. The brickwork over the chimney base is recessed this amount for five courses to allow for clearance for brick installation Photography 48. This evidence conclusively indicates that the house predates construction of the chimney brickwork and that the house footing most likely is missing its upper course.
- The footings of the extant verandah brick wall are located to the inside face of the former house footings, although the exact position could not be determined without first removing stones to gain access beneath the wall masonry. They may overlap and therefore it is not

possible to determine whether or not the 1950 verandah wall has its own footing. The footing for this wall in Trench 4 beneath the east verandah contains a compacted aggregate.

- A *in situ* timber post or stump was found in a 15 cm round hole to a depth of 20 cm at the projected SW corner of the kitchen wall, although it was badly weathered. Artefact infill was present in the hole around the timber, Photograph 49. This hole was examined as a potential support for either the extant kitchen or a former one. There was no masonry in the hole and the timber was too weathered to describe its finished shape, other than to suggest that it had a 100 x 100 mm cross-section and it most probably belongs to the extant structure as is suggested by it location at the exact corner of the kitchen. It was concluded that the hole and the area around the corner has been extensively eroded from water pouring off the corner of the roof due gutter failure. The excess water on this side of the kitchen most likely contributed to sub-floor erosion.

### 4.4.4 Conclusions from Trenches 1 & 2

- The house footing was constructed from selected flat fine grain sandstone blocks overlying a rubble base of much smaller stone, which in turn lies on a bright coloured gravel and clay at its base. This clay is a packing, possibly to level and stabilize. Mortar joins some stones of the footing, but much of its top course(s) is missing around the house. A lime-rich exterior render appears to have covered the face of the footing, possibly as a decorative finish and may well have continued up the brick wall of the original house.
- The chimney base of the kitchen is constructed with identical stone and design as the house, except that stone is definitely joined by mortar and at a level ca 25 cm below that of the homestead. This mortar bonding the brick and stone of the chimney is hard, unlike the mortar of the homestead that is a soft, lime rich mixture.
- The two footings are constructed hard against each other such that the first five courses of brick forming the chimney is offset 4.0 cm horizontally to allow for overlap of the homestead footing. This offset confirms that the homestead was present prior to construction of the chimney base.
- The timber support system for the detached kitchen walls consisted of single stone pads inserted unsupported below either posts or stumps. The floor and its supporting stumps were missing at the time of this investigation.
- The kitchen sub-floor structure rested on an undisturbed clay sediment that is now heavily impacted by animal burrows and possibly by dogs living under the floor. Deliberate and natural infilling of these burrows is indicated.
- A limited number of artefacts of heritage significance were uncovered by excavation of the detached kitchen. None of these pertained to the period of the mid-19th century habitation.
- No evidence of an earlier structure was uncovered in these two trenches.

## 4.5 Trench 3 - Delineating the Kitchen Perimeter

Trench 3 extends along the south long wall of the detached kitchen east of Trench 2 to a low masonry water tank stand where it turns the corner and continues along the east end wall of the kitchen, see Figure 9. It follows over this distance a highly fragmented mortar footpath and surface drains between it and the kitchen frame, but is widened around the stand in order to investigate its sub-surface fabric and any that may be associated with it. The aim of the investigation is to open up fabric for inspection and identification of earlier fabric. This was achieved without reference to spits due to the predominance of solid masonry, except around the stand where underlying soil sediments were excavated in levels in arbitrary depths. . Except for deeper penetration into underlying sediments at the stand, this exercise did not require level control where a simple cleaning technique was more appropriate. All loose soil was screened on a sieve with 4.0 mm square mesh apertures.

### 4.5.1 The Mortar Path

The paving is a 2.2 m wide rectangular thin layer of weak mortar that is highly fragmented throughout its length of ca 5.0 m, Photograph 50. Approximately 30% of it is missing pieces that appear to have migrated to the sub-floor cavity of the kitchen. Mortar of the path once continued into the stand masonry, but subsidence has separated it along the base of the stand.

The mortar overlies a previous stone paving that appears to be demolished except in the vicinity of the tank stand, Photograph 51. A mixture of demolition rubble consisting of brick fragments, stone, short iron pipe, slate, and fragments of sheet metal underlies the stone paving in the vicinity of the kitchen wall where a spoon drain(s) once functioned, Photograph 52. This rubble disappears mid-way out from the wall and the path appears to rest on clay without rubble.

A surface drain follows the edge of the mortar path at the kitchen wall to its eastern end where it turns the corner and empties down slope on the NE corner of the building. Some lengths of the drain are sections of preformed concrete slabs that are laid informally on brick and stone rubble whereas other lengths are loosely laid Northcote bricks that rest on soil. Extensive damage to the drain has resulted in its failure and partial loss of underlying sediment due to scouring, most probably exacerbated when gutters were removed from the kitchen roof. Excavation has demonstrated that the rubble most probably is demolition masonry involving older fabric of the homestead, including Northcote bricks and to a minor degree the hand-made Pontville brick. The rubble appears to terminate on compact artefact-free soil, 21 cm below surface but a deeper exploration would be required to locate undisturbed alluvial soil predating the Pontville settlement.

### 4.5.2 Stone Tank Stand

This stand sits on a light rubble footing at ground level and rises to a top edge that is lined by a single level line of red bricks, with a roughly finished render covering all exposed surfaces, Photograph 53. The wall of the stand tapers outward somewhat to its base. The interior of the rectangular structure is filled with loose stone and brick fragments in a matrix of soil. The depth of the interior fill was not determined. The interior render extends across the interior fill, as if to form a thin floor that is now missing in centre of the stand to expose the soil and brick fill. Bricks laid flat form its upper edge and these are flat and level. There is no sub-surface structure to the stand, although in the interest of maintaining fabric stability excavation was not taken substantially inside its perimeter to prove this beyond doubt. The footing on the eastern side of the stand, Photograph 54 is confined to the wall masonry and, like the other base on the opposite side, does not include a sub-surface structure.

The stand is crudely crafted and is somewhat fractured. The two historic photographs covering this area of the precinct, Photographs 1-2 dating to the 1930s clearly indicate that the stand was not present in the undated one when the roof drainage was absent from the kitchen, whereas the Moir photograph shows down pipes draining into a corrugated sheet metal water tank in 1933. Unfortunately the base of the tank is blocked from view so that its support cannot be described. Construction of the stand took place in the first half of the 20th century after the kitchen was built.

### 4.5.3 Spoon Drain

A spoon drain at the line of the kitchen wall intercepted surface water that was then carried around the outside wall of the kitchen to a lower point away outside the precinct, Photograph 55. Its design appears to have been somewhat *ad hoc* in that bricks, concrete pre-forms, and mortar were used for without a base. Presumably the thin mortar paving was installed to shed more water into the drain, but it clearly lost effectiveness in a fragmented form. It is doubtful that this drain was installed when the kitchen was constructed and excavation was directed to discovering underlying evidence of a former drain. No earlier fabric was located. Two short sections beneath the floor discharge waste water from the shower and laundry room suggesting the drain dates to the renovation of the kitchen when a second entry door was installed, along with internal plumbing to the building.

### 4.5.4 Trench 3 - Observations and Conclusions.

The fabric exposed in Trench 3 consists of masonry elements of two pavings and a stone water stand in Trench 3. The following conclusions are made about these elements.

- A thin mortar path most probably is an upgrade to an older stone paving that is mostly demolished. The absence of hand-made bricks suggests that neither of the two pavings were made during the 1950s renovation when surplus bricks became available. The age of the older paving is unknown.
- The underlying rubble contains some fragments of Northcote bricks and so is not older than construction of the kitchen where Northcote bricks is the sole masonry material.
- No structure or artefacts older than the kitchen was exposed in trench 3.

## 4.6 Trench 4 - East Verandah Fabric

Trench 4 is a 1 metre wide excavation stretching ca 7.5 m between Trench 2 in the north and the concrete steps to the south end of the east or rear verandah, Figure 9. Two features were excavated in this distance to reveal additional information about wall footings and fabric beneath the raised timber floor in the east verandah. All sediment disturbed was passed through a hand sieve with 4.0 mm square apertures. The two features are discussed separated as follows.

### 4.6.1 Wall Footings

The remnants of two footings are present in several locations in Trench 4. The first relates to the dwarf wall at the extant concrete steps and the mortar paving examined in Trench 3, see Figure 4. The trench at this location abuts the 1950s renovation, exposing all masonry elements of this wall line. Beneath the dwarf wall is a footing of pressed bricks that rests on stones of the former house footing predating this renovation, arrows 1 & 2 in Photograph 56. Bright orange gravel and clay of the sub-footing base or packing can be seen below the stone, arrow 3. This exposure indicates that the footing of two end rooms most likely extended across the back of the house along the verandah, although most of the stone is missing, presumably removed at the time of the 1950s renovation. A group of loose sandstone blocks at the ground surface appear to be remnants of the robbed footing that are well out of place, see project photographic file.

### 4.6.2 Pre-1950 East Verandah Floor

A second excavation of the wall line exposes the former verandah footing and sediments beneath the raised floor of the verandah, Photograph 57. A 4 inch ceramic pipe was removed to gain access and a single deeper exploratory pit was completed to further describe sediments below the pipe, Photograph 58. The following observations were made.

- A ceramic pipe at the ground surface lies next of a footing below the timber joist of the verandah. The pipe is a part of the 1950s storm water upgrade but the age of the footing is unclear. It consists of concrete overlying crushed rock and may be designed to support masonry of the dwarf wall but was not actually used, or alternately it may have supported a retainer for fill of the verandah. If the latter is correct, the footing may be 19th century in origin. No attempt was made to further remove masonry fabric or any of the fill itself.
- The alluvial clay below the drain pipe, as revealed in a small exposure pit, appears undisturbed below the depth of the pipe trench, Photograph 58.
- A thin mortar paving caps the underfloor clayey sediments beneath the raised floorboards of the verandah. This mortar is weak and almost certainly is a pre-1950s verandah floor that appears hand floated. Its surface is significantly irregular and it seems rather fragile given the heavy foot traffic that would have occurred in this area of the house. Charcoal and some stone fragments suggests that the underlying clay may contain artefacts and is fill down to the level of the footing base. This area of the house should be considered highly sensitive and should not be disturbed without first assessing its heritage significance.

## 4. 7 Trench 5, Sub-floor Cavity Central Room

The area inside the front door of the central room was chosen for excavation to examine sub-floor structures because the floor boards have rotted away and a clear view of the door opening is accessible here. Some boards were removed and a string line was positioned on the underlying sediments beneath the floor structure. A rectangle measuring 1.5 x 0.9 m of Trench5 was laid out on ground and the top most surface was first brushed to collect all loose material and then dry sieved on square mesh screens with 4.0 mm apertures, Photograph 59. This uncovered a distinct layer of semi-hard mortar that covered approximately half of the proposed excavation rectangle as drawn in Figure 5. The fabric surrounding the base of the door timberwork was excavated separately and these results are described in Section 3.6 above.

The underfloor sediments are dry and powdery and the area further under the floor is riddled with rabbit burrows. All deeper sediment was hand sieved through a screen with 4.0 mm square apertures. Brushing to a depth of ca 65 mm into loose sediment exposed a layer of weak mortar (**S35**) consisting of distinct patches of lime, roman cement, small brick (hand-made) fragments as well as plant fibre and pellets of charcoal. A portion of the mortar layer outside the trench boundary to the south was exposed for a better look, see Figure 8. The mortar surface undulates significantly across the exposure, it is not floated, it has no straight or formed edges and is not continuous across the

room. The thickest dimension examined was 3.5 cm. Where visible, the mortar was clearly broken through by the extant red gum floor stumps but otherwise appears undisturbed. Was this an earlier floor that has been altered by subsequent renovations?

Careful cleaning gave critical clues. The mortar is too weak and localized to be an effective wearing system for the room as a whole. A pattern of single parallel impressions align exactly with the empty insert holes in the brickwork at opposing sides of the sub-floor walls, suggesting they relate to former floor joists with nominal 2½ inch thicknesses, Photograph 60. The impressions themselves generally are abraded, although the shape of bottom and lower edge of one face of the joist is faithfully preserved over short distances. This evidence suggests the joists made contact with the mortar in a plastic state but moved and bounced above the mortar surface in the intervening years, possibly from changing wind pressure and human traffic. In this sense the pad was not designed to support the floor above it. The most probable explanation for the mortar is that it is a batching pad masons create to mix mortar and plaster used during house construction. The practice is common on remote building sites to maintain a degree of quality control for mortar used in brick laying. The pad then is an exact contemporary with installation of the floor joists.

All artefacts from the sieved sediments above the mortar pad are derived from both construction and demolition debris, especially render, and roofing nails and the nature of these materials is described in the sample and nail inventories. *Embedded* in both the upper surface of the pad and its base in contact with underlying clay are six stone Aboriginal artefacts, Photograph 61. All of these artefacts were recovered in lumps of mortar on the hand sieves during the normal process of cleaning.

### 4.8 Trench 6, Tank Stand at SE Corner of House

Trench 6 was established to expose four concrete water tank stand footings just below ground surface that were first discovered by soil probe Photograph 62 The footings consist of three courses of brick laid on a concrete base and sealed on top by concrete to support presumably timber legs. As measured from centres, the footings define a square 70 cm on a side. Paired Northcote bricks were present on three of the pads and those in the fourth are mortared over. The surrounding sediment consists of a mixture of charcoal, brick fragments (including those from hand-made bricks), small angular rock, most of which probably is both construction and demolition debris, and accordingly should be considered fill. A 180 mm deep pit was excavated to expose masonry between two pads as shown and this also exposed fill to this depth No attempt was made to further excavate in this trench and no artefacts were retained.

### 4.9 Trench 7, Outbuilding Footing and Deposits

Found initially by soil probe, this footing consists of a single row of lightly mortared Northcote bricks lying side-to-side beneath shallow soil and vegetation in a rectangular form, 3.4 x 2.0 m across, Photograph 63. The interior of the structure contains a dark soil, an array of discarded metal agricultural artefacts (*eg* wire, brackets, springs, oil tins, irrigation pipe couplings) that are scrapped. As fill, this debris spills over and beyond the structure an undetermined distance but appears in small amounts in relatively shallow deposits. Insufficient time was available to further explore the content of the structure by excavation to determine the design of the footing or the extent of deposits associated with it.

The likely functions of the structure, based on informant description and masonry outline, include a chook house, a toilet, a storage shed, or a pump house. The area surrounding this structure is the only location in the home precinct with artefact concentration.

### 4.10 Stone Ruins North of Homestead

Low mounds of stone blocks and soil are present in the track to the Webster cottage over an area of ca. 6 x 6 m, but extending parallel to the track for tens of metres. The ruin is located 55 meters down slope from the house (as measured from the north end room) and tens of meters further north from the existing entry track to the homestead that crosses Mullum Mullum Creek, Photograph 64. George Hawthorne recalls seeing standing columns or remnant walls at this site in his youth years but was not told of its function nor can he recall architectural details about fabric. It seems inconceivable that Newman the horse breeder would not have a proper stables or livery.

The masonry units consist of individual stone boulders, without mortar, barely poking above the ground surface. These are large flat sided boulders closely resembling those used in the Pontville footings and retaining walls installed around the homestead as terracing. Some concentrations ap-

pear to line the lower edge of the track and may be retaining walls whereas other concentrations exhibit geometric shapes. Probing detected additional stone but sub-surface investigation would be required to identify the presence of footings by arrangement or shape. No artefacts suggesting farming activity or human discard were detected to suggest habitation. No effort was made to further record the ruin. The most likely function for this building includes a stable or other farm outbuilding.

This site is potentially significant to Pontville in light of the lack of buildings in the inventory that may be expected for a cattle station where sheep were presumably also raised and where the owner kept champion race horses. It is plausible that this ruin was the stables or barn, two essential building on any farm that are typically located at the perimeter of the homestead precinct.

### 4.11 Other Deposits

In 1996, the installation of a security fence around Pontville buildings was monitored[39] for heritage material, the work involving sieving of sediment removed from each of the post holes with nominal size of 300 mm across and nominally 600 mm deep. Out of a total of 30 holes, 22 contained artefacts. Table 1 itemizes these as recorded in field notes, with the post numbering sequence commencing at the entrance gate post and running clockwise.

| No. | Artefact Description |
|---|---|
| 1 | No artefacts |
| 2 | No artefacts |
| 3 | 1 chert flake; retouched distal end; 2 chert discard flakes; 1 quartzite discard flake, sheep molar, 2 roof slates, I dinner plate lip w/ red stripe pattern, 1 textured louver window glass. |
| 4 | No artefacts |
| 5 | 1 chert discard flake, roof slates (< 5 g), textured louver window glass, pink ceramic, black plastic bangle; 6 clear bottle glass; 1 beer bottle glass. |
| 6 | 2 chert discard flakes; 1 chert end scraper w/ distal end retouch. |
| 7 | No artefacts. |
| 8 | Textured louver glass; 1 ceramic platter base in white; 1 clear bottle glass; roof slate (ca. 25 g); 3 clear glass from heavy bottle. |
| 9 | Leather work boot uppers with eyelets; terra cotta pipe. |
| 10 | Roof slate (ca. 30 g); 1 sheep molar; small coke bottle. |
| 11* | Roof slate, with one straight edge, ca. 200 g. |
| 12 | 3 drawn wire nails (2¼", 2", 1½"); metal container; 1 animal long bone. |
| 13 | Roof slate (< 5 g); electrical cord insulation. |
| 14 | 2 clear bottle glass; 1 ceramic white-ware. |
| 15 | No artefacts. |
| 16 | Ceramic white cup base; 1 porcelain bowl; plastic planter pot; clear bottle glass; roof slate; beer bottle glass. |
| 17 | Sheep long bone; roof slate; green stoneware; ceramic bowl w/ ornate ochre print; 6 ceramic white-ware plates, 3 ceramic blue-ware. |
| 18 | Bovine scapula; plastic container; ceramic white-ware; ceramic w/ red stripe; moulded glass bowl. |
| 19 | 2 clear glass sauce bottle tops with screw thread; 2 ceramic white-ware, 2 clear bottle glass. |
| 20 | 2 clear bottle glass; 1 ceramic white-ware cup. |
| 21 | Hand-made brick; 2 ceramic white-ware; roof slate; ceramic blue-ware w/ flower & w/ stripes. |
| 22 | Hand-made brick; kaolinite w/ paint; window glass; porcelain bowl. |
| 23 | Clear glass soft drink bottle top w/ lip for crown cap. |
| 24* | 2 clear bottle glass for wide-mouth jar, screw top; cast iron stove plate. |
| 25 | Roof slate# (ca. 250 g); hand-made brick; stoneware; clear window glass. |
| 26 | Roof slate (ca. 150 g); 1 small bronze slate nail#. |
| 27 | Rock only |
| 28* | Rock only |
| 29 | Rock only |
| 30 | 3 hand-made brick fragments#. |

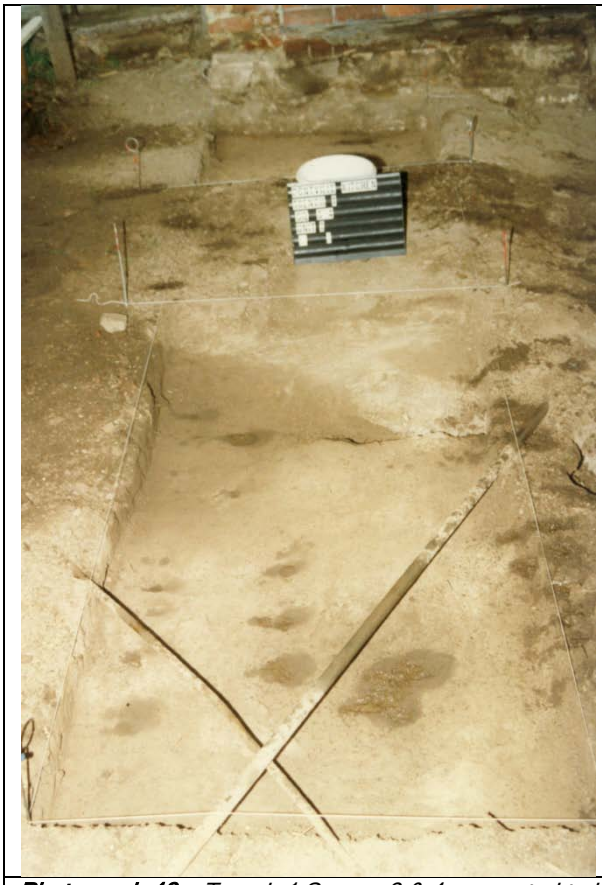
***Table 1*** *List of artefacts recovered on a sieve from auger holes in security fence installation, 1996. All artefacts in this inventory have been discarded unless stated individually.* * = Corner post, # = Artefact collected

Artefacts were also encountered in the vicinity of the south east corner of the security fence and continuing outside for a few meters across a shallow circular depression - the depression suspected of being artificial. A steel probe was used to detect materials beneath the ground surface around the home precinct in the course of the 1997 investigation. Low densities across much of the southern garden were encountered at depths not exceeding ca 20 cm.

[39] Luebbers 1996

***Photograph 41*** *Trench 1 before excavation commenced in detached kitchen, Pontville*

***Photograph 42*** *Trench 1 Square 1, at base of excavation*

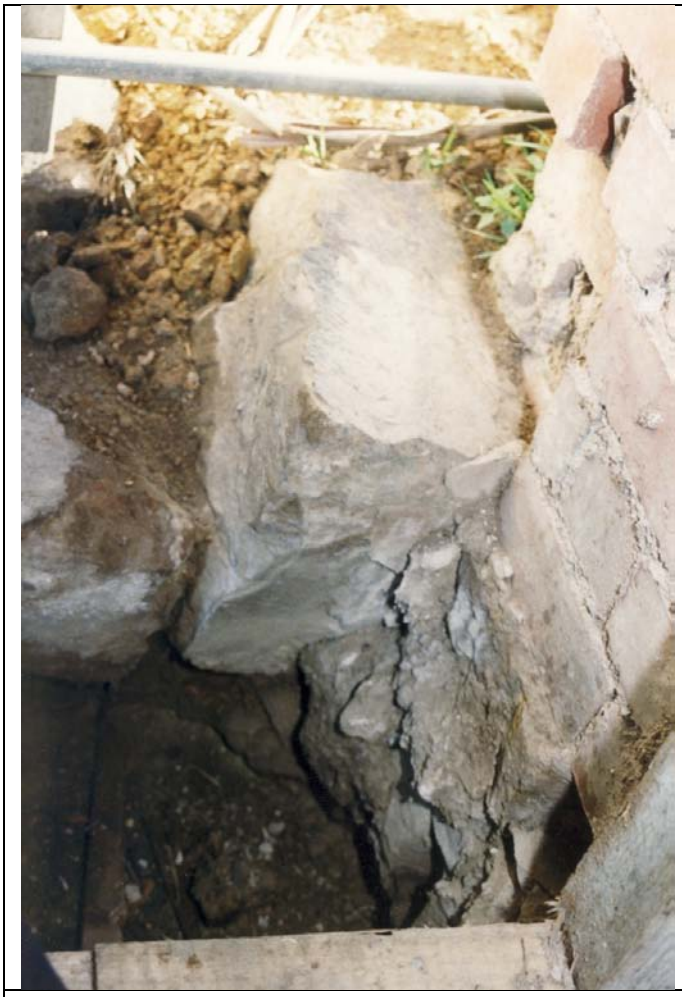


***Photograph 43*** *Trench 1 Square 3 & 4 excavated to base*


***Photograph 44*** *Trench 2 laid out with string after removal of concrete slab over house footings.*

***Photograph 45*** *Seen here is the original sandstone footing at the north wall abandoned in the 1950s renovation to enclose the north end room. This footing abuts the brick chimney base, right, and is visible outside the extant dwarf wall of the east verandah to the left.*

***Photograph 46*** *These three stones of the homestead footing are covered in mortar and are in situ. Trench 2 at conclusion of excavation.*



***Photograph 47*** *The thin mortar on the upright footing stone seen here continues behind the brickwork of the chimney, right. Trench 2 at conclusion of excavation.*

***Photograph 48*** *Recess in brick work (arrow) indicates homestead stone footing on left was built first and that its upper coarse is missing. Trench 2 showing base of chimney footing.*

***Photograph 49*** *Seen here is the fully excavated Trench 2 showing a large square post hole next to the vertical timber post and the junction between the stone footings of the chimney and homestead (left).*

***Photograph 50*** *Path on southern face of detached kitchen before Trench 3 was excavated.*

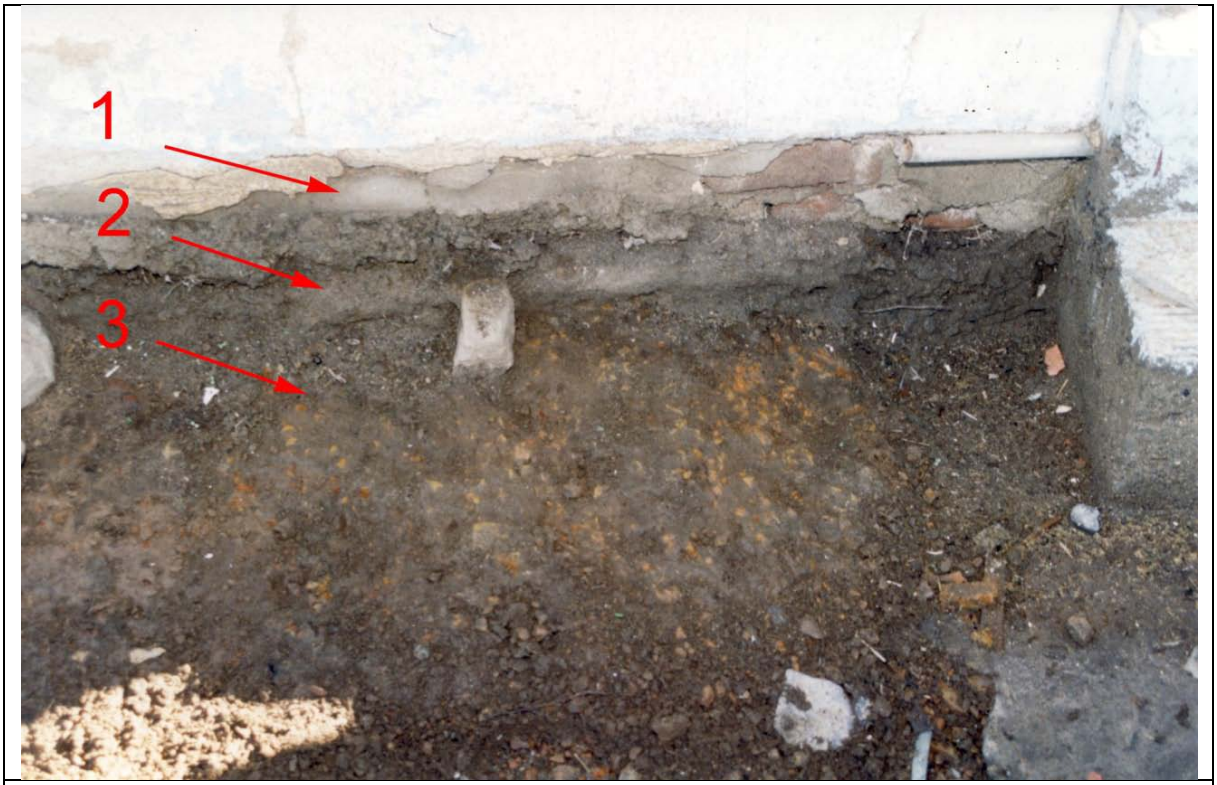
***Photograph 51*** *Large blocks of stone, some rounded from wear, can be seen here below the thin mortar layer at the stone stand. A dilapidated spoon drain composed of concrete and brick can be seen between the path and the location of the kitchen wall, left.*


***Photograph 52*** *Section through path alignment shows underlying rubble lying on undisturbed soil, Trench 3*

***Photograph 53*** *Seen here is the soil underlying stone blocks of the path at the tank stand, Trench 3.*

***Photograph 54*** *Seen here is demolition rubble at the eastern edge of the stone tank stand, Trench 3.*

***Photograph 55*** *Seen here is the spoon drain that collected waste from the wash room of the kitchen*



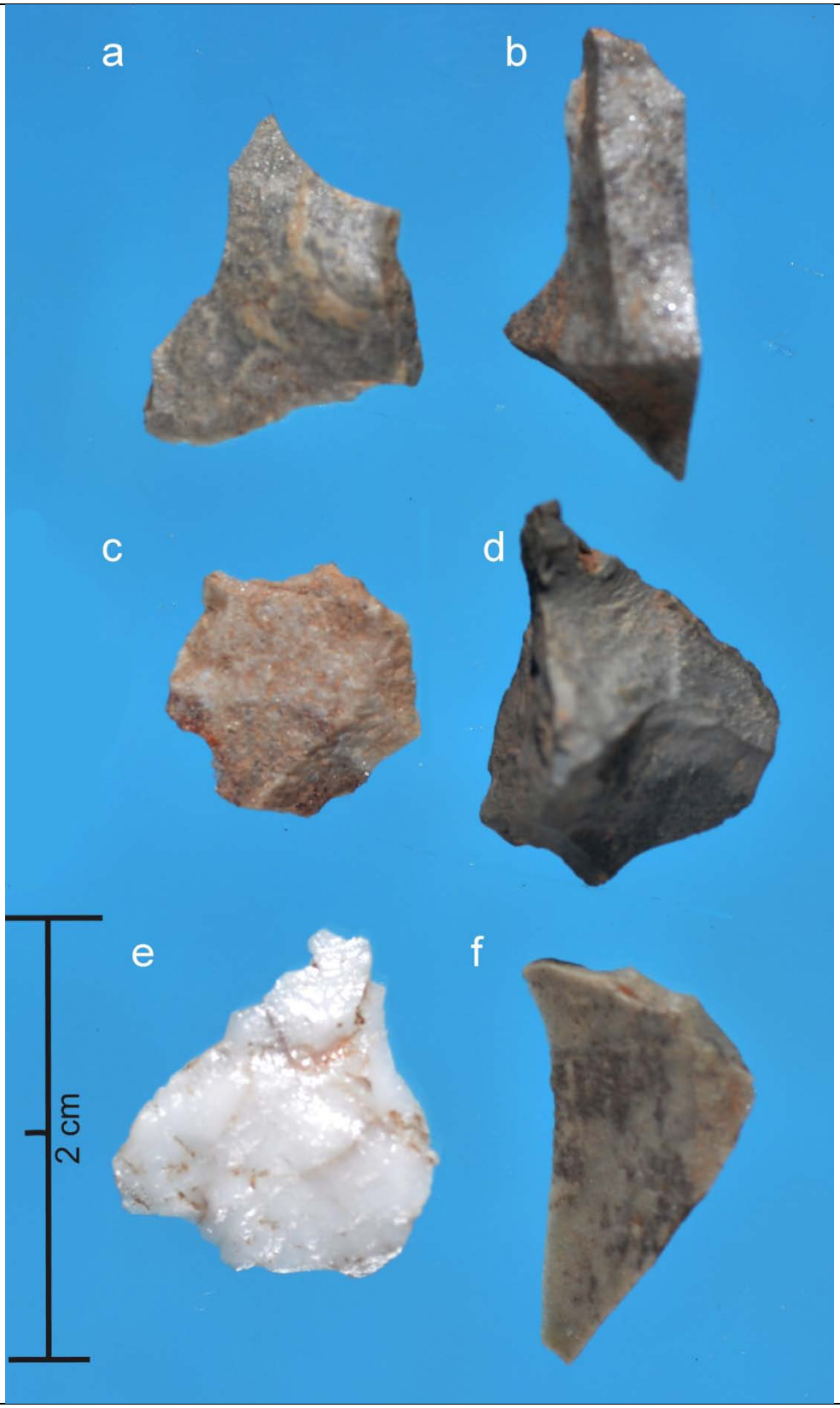

***Photograph 56*** *Seen here are 1) brick footing for the dwarf wall, 2) remnant stone footing of the original verandah, and , 3) orange gravel and clay packing beneath the stone, Trench 4.*

***Photograph 57*** *Seen here under the raised timber floor of the east verandah is a thin mortar floor capping a layer of fill that may contain artefacts. This floor may be original. A thin concrete footing for the outside wall of the verandah, presumably a renovation that was not used, can be seen abutting the timber upright post. Trench 4. Composite image.*

***Photograph 58*** *Seen here is test pit in Trench 4 revealing a thin concrete footing, right, beneath the outer wall of the east verandah and a shallow trench for a ceramic storm water pipe. The clay beneath the pipe appears to be undisturbed.*

**Photograph 59** *Trench 5 layout in central room at commencement of excavation marked by string and chaining pins, with front door seen at top of image.*

**Photograph 60** *Found in the sub-floor area of the central room of Pontville in Trench 5 is a weak mortar pad (seen as a light colour between joists) on which are parallel linear impressions, arrows, made by former floor joists. These marks occur outside Trench 5.*




***Photograph 61*** *Aboriginal flaked artefacts from mortar pad, Trench 5, Central Room. a)silcrete flake, b) silcrete flake, c) quartzite flake, d) silcrete flake, e) quartz flake, f) silcrete backed microlith.*

***Photograph 62*** *Trench 6 showing concrete and brick pads of water tank stand.*

***Photograph 63*** *View of South Garden and brick footing found in Trench 7, foreground. Agricultural and residential artefacts overlie the deposit but no systematic excavation was undertaken to delineate them.*

***Photograph 64*** *View of masonry ruins in Webster's hut track 55 m north of homestead, foregrd. No excavation was undertaken here but the structure is believed to have been assembled in the 19th century and could belong to the original Pontville habitation. Sandstone blocks are strewn along the axis of the track, both to the right and the left of camera.*

# 5 Thomas Sweeney's Culla Hill

## 5.1 Introduction

An auction of Thomas Sweeney's Culla Hill family property on the Yarra River 600 m north of Pontville in Eltham provided a rare opportunity to examine another mid-19th century building with a significant amount of fabric still surviving intact. Beyond the mere comparison that might be made between architectural form and its influence on residential development more widely, the two properties were themselves established at a time a young colonial Melbourne market had not yet been stimulated by the quest for gold, and Hobart was the closest established industrial and trading centre. The specific responses to these social and political circumstances by Sweeny and Newman before him in setting up households and establishing viable runs are of special interest to this and future studies for the area. Add to this mix our lack of historic detail of agricultural development on individual holdings due to the loss of critical physical evidence and the need to record is warranted. With preparations for the sale in an advanced stage, the inspection was carried out between June-August 1997 to record the oldest portion of the extensively altered building and finally to prepare a scaled drawing for future reference. No excavations were undertaken for this investigation.


## 5.2 Historical Background [40]

At the time of his death in 1867 at the age of 64, Thomas Sweeney was a well respected member of the Eltham community. He left to his wife Margaret and their family 418 acres of fertile land adjoining the Yarra River, including Culla Hill and a proven means of making a living from the fertile soils of Sweeney's Flat.

His life in Australia was quite possibly a stroke of good fortune in disguise following social unrest in his native Ireland. On 28 March 1823 at the Clonmel Springs Assizes[41], Thomas and a second man were convicted under the Whiteboy Act for a felonious assault on the house of Patrick Guyder, at Cullohill, and with having set said house on fire. At 20 years of age he was sentenced to be hanged on the 26th of April of that year. His crime was commuted to life transportation by the court and he arrived in Sydney aboard the convict ship *Isabella* in December 1823.

Thomas received a ticket of leave in 1831 that allowed him to reside in the district of Illawarra and there he became involved in the marketing of cedar and other goods in the coastal trading network to settlers in the thriving colony of New South Wales. On the 18th of February 1833, he married Bridget Coleman in Sydney and in that year their first child Mary was born. In order to meet newly announced restrictions on ticket holders, a memorial was prepared for the Governor stating that Sweeney had purchased one hundred acres of land with fifty head of cattle and that he owned a half share in a boat. By 1835, Thomas was expanding his interest in developing his coastal trade and their son Patrick was born. Thomas petitioned Governor Bourke for permission to transport cedar between Sydney and Manning River to the north. Something took place to have this permission withdrawn, possibly a breach by Thomas and with the unexpected death of his wife, Thomas was forced to rethink his activities. In 1838 he married Margaret Meehan and on February 15, 1838, the couple arrived in Port Philip to settle a new property. Patrick Sweeney II was born in December 1838, and twins Margaret and Agnes were born in May 1841.

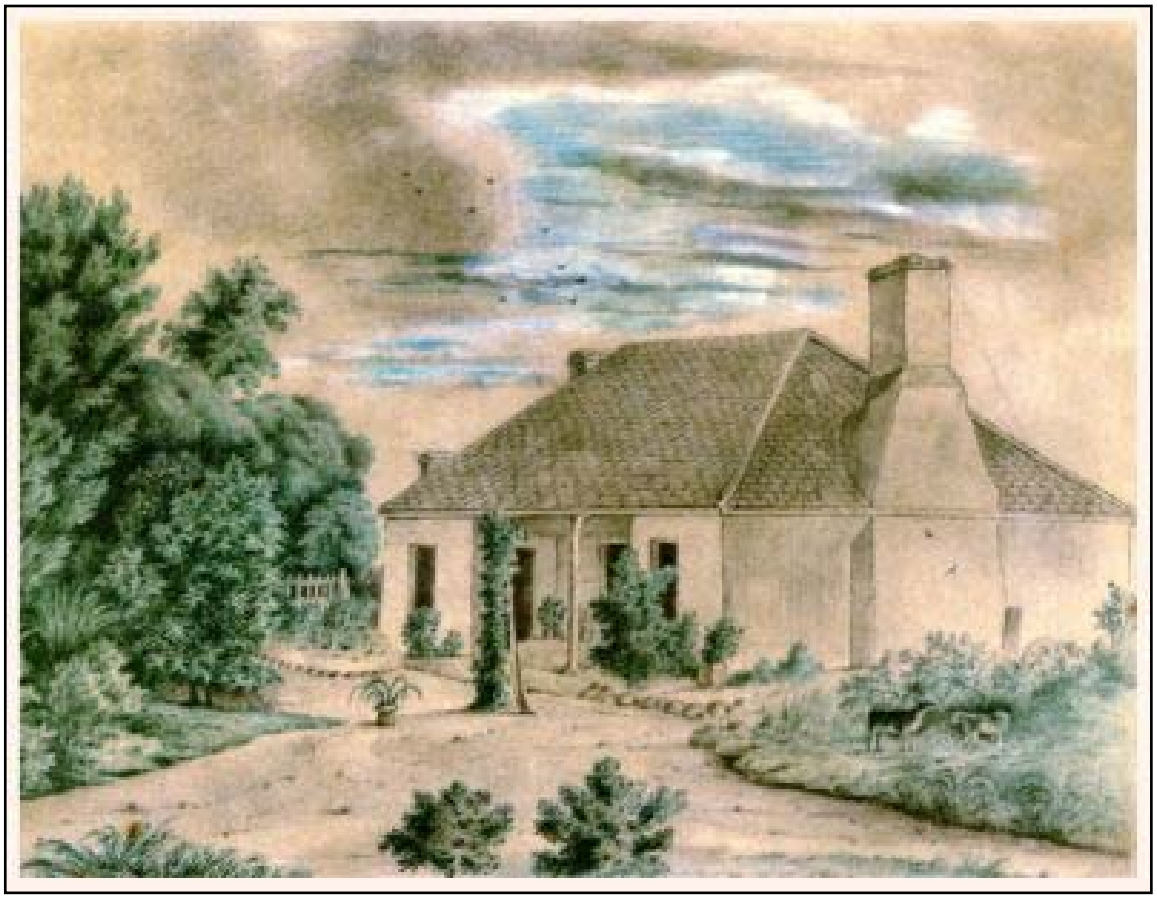
[40] All information given here is provided courtesy of Peter Cuffley, 1997.
[41] The Courts of Assize, or assizes, were periodic criminal courts held around England and Wales until 1972, when they were abolished by the Courts Act 1971. They dealt with the more serious cases of criminal justice.

It was in May 1844 that Thomas sought purchase rights in the Parish of Nillumbik for what was initially to become 110 acres at Culla Hill in Eltham. The first building in 1844/45 erected on the property was reported to be a weatherboard hut measuring about 10 x 12 feet which became the residence until a more permanent house could be built. A second building was an Irish style "longhouse" that consisted of three rooms laid out end-to- end that is featured in a later magazine article (Cooper 1940) about the property. The family presumably resided in this more substantial house until the larger cottage was constructed in the following decade or so. A barn, also featured in the 1940 article, was present at the 1997 auction, and again family descendents report that it was one of the first buildings erected on the property. It is understood by descendants that Thomas' first economic stability was gained with the discovery of gold in the district beginning in mid-1851 that gave him a market for his vegetables and possibly beef as the local population swelled in the remaining years of the decade. This affluence from the mining bonanza, especially the opening of local markets in the mid-Yarra River valley provided the economic basis for Thomas and his family to build the Culla Hill cottage at some time in the late 1850s.

### 5.3 Culla Hill Documentation

A search of documentation held by the Burston family (current owners of Culla Hill), the Warrandyte Historical Society, and Mr Peter Cuffley provides the historical background for Culla Hill. The most important sources are as follows:

- February 1940 *The Australian Home Beautiful* feature article: contains numerous photographs and description of the interior layout, exterior views, and views of a one room hut with walls of palings, a two room solid stone wash-house/kitchen, and a stone and brick barn, all early buildings associated with Thomas Sweeney and family.
- A photograph showing Patrick Sweeney (son of Thomas) seated in the front garden next to the southern corner of the house with his four daughters, dated 1905-1908. Depicted is the front of the house as it appears today in terms of layout. The roof consists of slates and the front walls are finished in a white render or plaster and ruled ashlar lines appear across the surface, although they are not filled by a black line. The southern end wall is clearly rendered in a grey or dull colour and is not incised in any way, suggesting that only the front of the house was so decorated. This photograph is published by Cuffley (1996:37) and has been made available for this study by courtesy of the Ericson family.
- A photograph of the southern garden and south end wall of the house, dated 1900-1920 shows two double hung sash windows and a down pipe centrally located between the front and back walls of the house. A dilapidated gate opens into a garden enclosure that includes a large underground rainwater tank with hand pump. The underground rainwater tank is covered by loose timber planks which are supported on a ridge pole. This photograph has been supplied by Peter Cuffley and appears in his book (?1996).
- A drawing of Culla Hill attributed to an itinerate artist Charles Bertie who compiled it in c. 1892 at the request of Mary Sweeney, Photograph 65. It depicts the homestead as viewed from the north-east garden, showing the front verandah and the large external fireplace in the north of the building. It has a slate roof.
- Several photographic snaps pertaining to the period of the 1951 renovations were made available by Michael Burston. These include various views of the two roomed stone cottage and a low level aerial photograph of the extended homestead taken in colour from a helicopter in the early 1960s.
- A collection of blue prints compiled by the architectural firm who supervised extension work at the homestead for the Burston family after December 1950.
- An undated photograph of the homestead and barn, Photograph 66, believed to predate the 1940s Home Beautiful article. The north fireplace is prominent in this image.
- An image of the weatherboard hut created in early 19h century is said to be first hut Sweeney built on the property, Photography 67. This hut was sited some ten metres away from the cottage and may well have been a kitchen for most of its life in the 19th century.



***Photograph 65*** *Charles H. Bertie drawing of Culla Hill compiled in ca. 1892. Courtesy Peter Cuffley.*

### 5.4 Recorded Periods of Renovation

There are two major periods of recorded renovations to the Culla Hill homestead building, each involving demolition of some existing fabric and the addition of new materials to upgrade and modernise the residency. These are summarised as follows.

***Photograph 66*** *Shown here is the northern end of Culla Hill homestead with the main fireplace intact and the barn seen to rear. http://vrwc.org.au/carrucan-pics/displayimage.php?album=5&pos=24*

***Photograph 67*** *The weather board shed seen here is reported to be an original Sweeney dwelling at Culla Hill.*

1951 & later

The most extensive renovations to Culla Hill took place after the Burston family purchased the property in 1950 and set about changes to suit the needs of a young family. A blue print compiled by the Melbourne architectural firm Marcus Martin in December 1950 indicates that two bedrooms and a bath had been added to the southern end of the homestead prior to the first stage of expansion. Their plans included the addition of two more bedrooms further south of the previous renovation, with the end room being refitted with a new hearth that was relocated slighted from an old position. At this stage, the south fireplace had been relocated a few feet west and the southern end of the original Culla Hill homestead had already been re-built by the previous tenants. A subsequent stage of additions included the construction of a large family/sitting room, *en suite* bathroom and master bedroom to the west, and extensions that created a wing that included a kitchenette, dark room, and a generous family room. It was at this point that the original front entry to the older homestead section was abandoned in favour of a centralised entrance porch and passageway which lead into a main reception area. A view of the front of Culla Hill reveals little has changed, Photograph 68

1939-40

This alteration occurred in a year or two prior to the publication of *The Australian Home Beautiful* article featuring Culla Hill. It appears to involve largely minor changes to door or window openings rather than to the basic layout of the existing 19th century structure. It probably included the installation of plumbing in a bathroom and the kitchen (a dunny was present outside the south end of the house), and possibly an upgrade to the kitchen. In this publication, the removal of the north fireplace is mentioned as a recent event, but anecdotal information from Peter Cuffley suggests that it was not present in 1938 when Sweeney descendants visited the property during a Easter holiday. No specific information was obtained about earlier alterations to the original homestead building.

***Photograph 68*** Front exterior, Culla Hill 1997, being presented for auction in June.

***Photograph 69*** *Shown here are renovated ceiling joists in loft area, Culla Hill, with ceiling joists*

***Photograph 70*** *Entrance way through ceiling to loft. entrance to side loft , lower left. The brick loft wall is seen centre and central loft is to the right.*

***Photograph 71*** *The plaster on this vertical wall above the front verandah ceiling has been scored for a finishing coat.*

## 5.5 Fabric Analysis

The Homestead in 1997

The general form and elevation of the modern house, Figure 9A, features enclosed end rooms which are separated by a central living area consisting of a single open core room and a front verandah under a single high pitched roof. These are traits of the low bungalow style that typifies the layout and form of Pontville. The masonry elements consist of double brick exterior walls throughout, those in the core rooms rising to the rafters to form a central loft within the roof cavity. The end-walls of the verandah are structurally joined to the core wall and also rise to the rafters. The six windows on the front (east) facing walls all contain double (probably unweighted) sashes with 6 glass panes each. Deep wear patterns in the timber thresholds of the two external doors to the core rooms suggest that the original floor height has been retained in the existing floor, although the owner reports that the floorboards themselves are less than 40 years old. In its current form, the central room functions as a dining room-parlour area, with a ceiling-to-floor bay window providing views into a garden to the north and a post-1950s renovated fireplace with a shallow firebox shedding warmth into the open central living area from the south. An open study has been established in the north-eastern corner of the north-end room, whereas the south end room has been renovated as a toilet and forms a part of a passage way to a greatly enlarged home which took shape after 1951. None of the above-floor 19th century fabric of the house south of the fireplace survives, except the eastern external wall of the south end room. A vertical stress crack on the external face of this wall demarcates the join between the 19th century wall and the 1951 addition to the west. The entire western wall of the homestead is either renovated or is covered by cladding and is not available for inspection.

The Homestead in 1940

Analysis of images published in 1940 allow a description of house layout prior to the Burston renovations in the early 1950s, Figure 9B. The core living area was open and not divided by a central wall and a fireplace appears in the near mid-point of its southern wall heating it and a long end room through a double flue. The northern fireplace had been replaced by floor-to-ceiling French doors and a small nursery was retained from the original layout. Otherwise, the layout from the original construction remained unaltered, Figure 9C.

## 5.6 Roof Cavity

Corrugated cement tiles over hardwood battens installed after 1951 form a replacement for a slate tile roof across the whole homestead structure. The timber elements in the roof south of the south fireplace are also a renovation and will be ignored in this discussion. To the north the rafters all bear the distinctive deep parallel kerfs of a broad hand rip saw as does the ridge pole and the wall plate at the gutter line, the natural curvature of the tree being well preserved in many roof timbers. These are characteristic of pit sawn timber and indicate that most of the roof originated in the mid-19th century. Installed as a single piece from ridge pole to wall plate, each long rafter is carried on a mortar base on the core wall, and exhibits the typical contour of natural outer tree surface along at least one face. Nominal sections measure 2 ¼ x 3.0 inches, but in reality vary widely from one rafter to the next and within the length of each piece. Under-purlins with props support some rafters above the loft wall, presumably following replacement by larger timber required to carry the heavier tiles. The only cross ties between rafters were installed to carry a hot water service and other plumbing within the last 50 years. Timber trim at the northern end of the building indicates the general position of the chimney depicted by Charles Bertie in c. 1892. Three adjoining battens from the 19th century roof were found attached to their contemporaneous short rafters in the north-western corner of the house, as indicated in Figure 10. These are sawn Oregon pine with 22.0 x 34.0 mm cross-sections and are positioned on the rafter at 7 inch centres. They are attached to the rafter with one or two 2” Ewbank nails and bear 1 ½ inch Type 1 zinc alloy roofing nails, which are unclenched. The battens were cut to facilitate the renovation and are therefore too short to determine the spacing of the roofing nails. Presumably these battens (and several other loose ones) carried slates and the absence of empty nails holes in them indicates that it is unlikely that they supported an earlier roof cladding material.

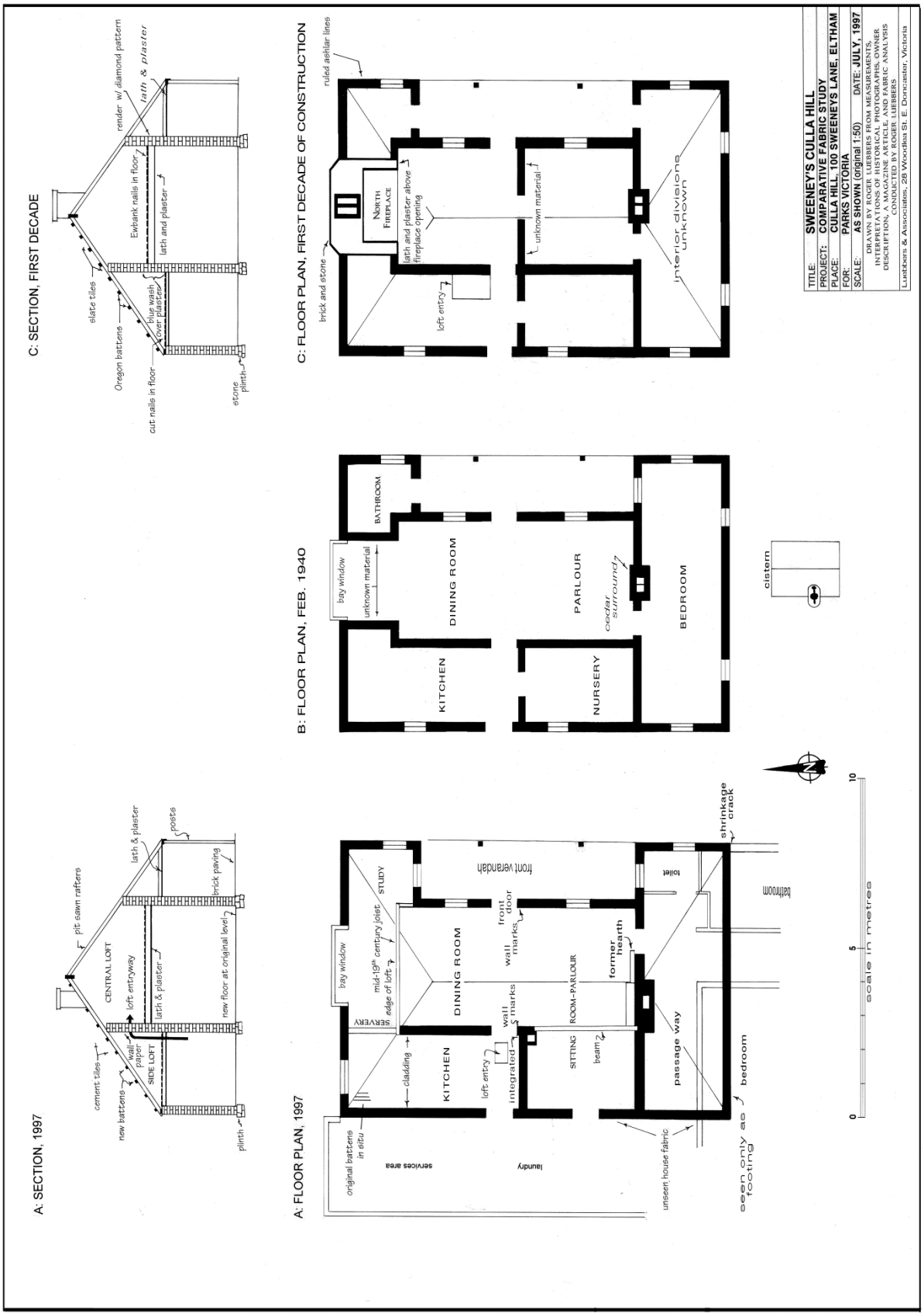



***FIGURE 10*** *Floor plan of Culla Hill at three periods of habitation.*

With the cement tiles remaining in place, it was not possible to inspect the upper rafter edges for empty nail holes which would indicate earlier roof support elements.

The extant chimney of the south fireplace is constructed with a single flue from hand-made bricks, which have been re-bedded in a hard mortar of Portland cement, and the stack is capped with modern machine-made bricks. The cross-linked bricks that joined the original chimney to the southern face of the internal wall are broken away, indicating the position of the former chimney. The current chimney has therefore been relocated several feet westward of its original position. The weight of this evidence suggests that the extant fireplace is entirely a renovation that occurred after 1940 when it was described as a double chimney, the fireboxes facing into the parlour to the north and the long bedroom in the south end room. The earlier fireplace in the parlour with its cedar surround is shown in a photograph published in 1940.

A thick layer of loose insulation (mineral wool) covering much of the flat surfaces of the timberwork below the roof hampers full inspection of the floors and the associated timbers of the loft. A hardwood timber floor covers the entire cavity within the central loft, except that some boards have been removed in the south-east area. The boards are nominally 5/8 inches thick, are laid edge joined rather that T&G, and have been pit sawn. They are nailed directly to 2 ¼ x 7.0 inch hard wood ceiling joists, which are also pit sawn. A small number of floor boards appear to be replacements.

A floor with similar boards covers the entire ceiling over the former nursery in what might be termed a side loft. They are attached to short hard-wood joists with 2 inch Ewbank nails, but insulation obscures the exact arrangement of the floor design. Details of the 1951 renovation that included the installation of a new timber beam to support the joists in the central room and the side loft can be seen in Photograph 69.

Entry into the roof cavity is gained by a small square timber lined hole in the ceiling of the kitchen immediately above the passage way to the parlour. A finished opening in the brick core wall provides access directly into the loft via a stepped recess in the joinery of the floor itself. Post-1940s cladding of the kitchen ceiling obscures details of the original entry design from floor level. The external face of the core brick wall above this ceiling has been rendered with a lime rich plaster to the roof line for the length of the kitchen and a pale blue lime wash, Photograph 25, covers the lower half of it. The northern half of this plaster has been removed or is damaged, thus making it impossible to determine whether or not the blue wash extended the full width of the kitchen. The presence of this wash indicates that the wall was once open to view from floor level and that the side loft was probably inhabited. Because the upper core wall south of the entry into the central loft is missing, it is not possible to comment on its decorative finish.

A double brick wall separating the kitchen from the former nursery rises to meet the rafters in an identical manner as the walls of the core wall. An opening at its junction with the core wall provides direct entry into the lower side loft over the nursery to the south. A special effort was made to investigate the structural joint between these two walls in the loft to determine whether or not they were integrated at the time of construction. The insulation at the joint was brushed away and strong lights were used to examine the upper two brick courses of the opening of the dividing wall. The bricks in the wall are hand-made and are identical in colour and size to those in the core wall. The bedding mortar as well appears, at least superficially, to be identical in both walls. The bricks are structurally fully integrated at the opening and therefore construction of the two walls is most probably contemporaneous.

The remnants of a light weight floor also occur over the kitchen ceiling in what could be considered a possible continuation of the side loft, although the flooring has been significantly altered or individual boards have been removed. It consists of thin pit sawn timber of various staggered lengths that are nailed haphazardly in about the centre of the loft, the western edge originally aligning with short vertical studs that join the joists with the rafters the full length of the loft.

A lath and plaster ceiling in the main rooms below the central loft is attached to the heavy pit-sawn ceiling joists. The ceiling material in the small open study is not readily identifiable because it is painted, but it covers a lath and plaster ceiling which is a continuation of the front verandah ceiling.

A lath and plaster ceiling is also attached to joists over the front verandah. The external vertical face of the core wall above the ceiling, Photograph 71, has been rendered in a fine textured semi-hard lime-rich mortar, possibly a mixture of Roman Cement and sandy lime. A set of criss-crossing parallel lines have been cut across the render for the height of the wall and full width of the verandah, the pattern continuing behind the ceiling joinery where it is obscured by the lath and plaster. The render was plastic at the time the lines were created and the tool used cut deep incisions like those of a trowel. The affect is a diamond pattern across the whole upper wall of the verandah. While the lines are generally straight and regularly spaced, they are clearly not ruled. A thin "crust" of fines has been created on the render surface (as viewed microscopically in cross-section) indicating that the mixture was tooled at the time of application, possibly with a wooden float. It is usual for a scratch coat or the initial floated coat to be scored in this manner to promote adhesion of subsequent plaster, and for it to be spread with a float in an attempt to achieve a uniform smooth surface. Whether or not the diamond pattern was itself intended to be ornamental is not certain:- the application of a render to the upper wall indicates the intention to create a weather seal and possibly to finish off with a decorative plaster for viewing from below. Installation of the lath and plaster ceiling over the verandah hid this upper wall from view and hence ended its decorative function, probably either at the end of construction or sometime soon after.

It should be pointed out in passing that while most lath observed in the building is sawn softwood, some lath in the northern end of the verandah ceiling and continuing into the end room appears to be exceedingly narrow and is riven hardwood. Detailed examination to determine the extent of lath was not undertaken. This ceiling is believed from evidence discussed elsewhere in this report to be original at the time of construction. See sample CH-15.

### 5.7 House Interior

The interior of the house was examined for evidence of structural alterations. The results are as follows:-

- A hearth from an earlier fireplace has been incorporated into the extant floor spanning the south fireplace and a portion of the door opening to the east, indicating the position of this former structure. This is in agreement with a 1940 photograph showing a small fireplace and cedar surround and a door leading into the bedroom immediately to the west (to the right).
- The window in the toilet facing the front verandah is filled and shrinkage cracks indicate that the opening continues to floor level, suggesting that it is a former door opening. This is confirmed by the c. 1892 Bertie drawing.
- The window in the study looking into the front verandah has shrinkage cracks from sill to the floor, suggesting that it too was once a door. This is confirmed by the c. 1905-8 Sweeney photograph.
- Joint marks and slight surface projections representing a former wall placement can be seen partially obscured by the southern architraves of both external doors in the dining room. The one at the front door can be traced from the ceiling more than half way down the wall, indicating that the wall reached the ceiling. The width of the marks suggests a single brick partition wall, although further inspection of the sub-floor fabric as well as the walls behind the wall paper would be required to confirm this.
- A recess in the western wall of the former nursery appears to be a former window opening. This is confirmed in the 1940 photographic series of the house.
- The walls of the kitchen are covered by panels or cupboards and therefore could not be inspected.
- The large fireplace in the north end wall, referred to here as the Northern Fireplace, has been replaced by a floor to ceiling bay window.

### 5.8 Nails

The timber work in the roof was methodically inspected to identify nail types. Nail identification for Culla Hill is based on the Pontville typology described in Chapter 3.10 in this report and analysis of a large number of *in situ* and loose nails in the roof cavity of Culla Hill. A description of nails which are fully embedded in timber would ordinarily fail if the shank is not visible. In this case, several nails were found still fixed to timber in their original *in situ* position but loose enough to remove by two fin-

gers. Because these had lost their functional role as fasteners, they could be removed safely to obtain vital evidence in confirming detailed technical identification of many nails which were otherwise not available. The following summary lists the results of this study.

- Slates were attached to battens with a solid zinc alloy roofing clout which is very slightly more light weight and at Pontville are referred to as Roofing Clout Type 2.
- Slate-bearing battens were attached to the rafter with a classic 2 inch Ewbank nail.
- Rafter ends were fastened to the ridge or the wall plate by either 2 inch or 2 ½ inch machine-pressed Type 1 nails.
- Timber floor boards in the central loft are attached with a heavy duty 2 inch cut nail of special interest. The example obtained is a composite of two cut nails, one much thinner than the other, the two sheets clearly being cut together by the same shearing operation to form a single functional fastener. The two pieces were poorly bonded at the time of manufacture by projecting burrs along their edges, but otherwise conform to the standard tapered cut nail with a lug head projecting to one side, cut nail Type 1. Several zinc alloy nails like this were observed, although the standard variety were also present in the floor.
- Timber floor boards in the side loft are all attached to the joist by a 2 inch machine-pressed Type 1 Ewbank nail. This form is a light weight version of the Ewbank nail which was used to fasten the rafters.
- The lath and plaster ceilings remain fully intact in the house or are covered by modern cladding and therefore were not accessible for nail identification.

In summary, the nail assemblage from Culla Hill is dominated by the Ewbank and cut nails types which were manufactured in the period 1840-1870 with no mixture of types used within the same application. This pattern contrasts markedly with the construction practices employing a mixture of nail types, including older nail types, at Pontville. The significance of this will be discussed in the final chapter.

## 5.9 Layout at Construction Time

The floor plan of Culla Hill for the first decade after construction has been reconstructed by combining the results of the fabric analysis and documentation compiled in the February 1940 publication. The structural elements of the original house consisted of the core wall of double brick construction and timberwork in the roof of pit sawn Australian hardwood, and external walls with a front facing verandah separating end rooms to the north and south. The rear of the house appears to have been enclosed to form internal rooms and there is no evidence to indicate an open rear verandah. The roof consisted of slates early in its history and no evidence suggesting that it was ever clad in timber shingles has come to light. There were irregular placements and sizes of windows and doors and a general sense of being hand-crafted gives the house an overall rustic appearance, although construction was clearly conducted by skilled, experienced craftsman. The overall form and layout did not deviate significantly from this design in the 150 years or so of use.

The exceptions are changes that occurred to the oversize fireplace in the north end room and the internal walls that may have surrounded it, and to a division wall in the central rooms. The simple fact that none of this fabric remains has made it necessary to engage in some conjecture to finish off the floor plan for that period. The following discussion develops the evidence from the fabric analysis to support this reconstruction.

North Fireplace

The north fireplace dominated the layout of the northern end of the house and its removal prior to 1938 substantially changed the layout of that end of the house. The opening created was filled by a wide ceiling-to-floor bay window which gives no accurate indication of the fireplace design. Therefore a detailed search was made to identify any fabric relating to the fireplace. In order to complete this analysis, it is necessary to first describe the renovated fabric surrounding the fireplace so the outline of the fabric at the time of construction can be deduced.

The mid-19$^{th}$ century timber floor boards in the north end of the central loft finish neatly in a line over the first heavy ceiling joist and they are attached by mid-19$^{th}$ century machine-pressed nails, indicating that this part of the loft abutted a vertical structure at the time of construction. The first two joists in the western core wall are supported in insert holes, but their eastern ends rest only on a light-weight bearer plate and timber blocks from a 20$^{th}$ century renovation which are completely unsupported underneath by a load bearing structure. The bearer plate however clearly supports other

main ceiling joists in their original mortar bed south of this point and it continues underneath the first two joists, indicating that the eastern core wall did extend northward the length of the loft and most likely carried the rafters over this distance. In this way, it was originally a mirror image of the western core wall, which is largely intact, except for a few missing bricks at its northern edge.

There are no nail holes or markings of any kind in the rafters immediately above the first loft joist to suggest that the mid-roof members under the northern pitch were carried on an intermediate wall plate above the loft or that the cross wall projected above the loft floor to support these roof timbers. In fact, trapped *in situ* behind the extant ceiling next to the 1st ceiling joist is a large vertical slab of plaster with empty lath marks, the lath was most probably removed during a previous renovation. This slab contains an abundant quantity of hair, which was common in buildings in the 1850s in Victoria and there is little question that this sample marks the position of an early wall that spanned this part of the room. It also is strong evidence suggesting that the cross-wall beneath the loft floor at this point was originally timber, and was designed with a large low opening closely resembling the one achieved in the 1940 renovation. This evidence indicates that the only division wall spanning the room in front of the fireplace was timber framed and was covered in lath and plaster.

The original rafters all survive *in situ* in the end of the building, although new ones have been added to fill the hole left in the roof when the fireplace was removed prior to 1938. The arrangement of both rafters and wall plates in this end of the house is illustrated in Figure 11. The long ones to the sides were angled to avoid the fireplace and continue as single pieces to wall plates, thus giving no direct indication of the size of the demolished masonry structure. The length of the in-fill wall plate is slightly greater than the outside width of the extant bay window, thereby suggesting a maximum chimney width of ca. 2.6 metres. The ends of the two central short rafters however are notched and contain *in situ* machine-made, Type 1 nails (Ewbank), for installation on a wall plate, although the plate itself is missing.

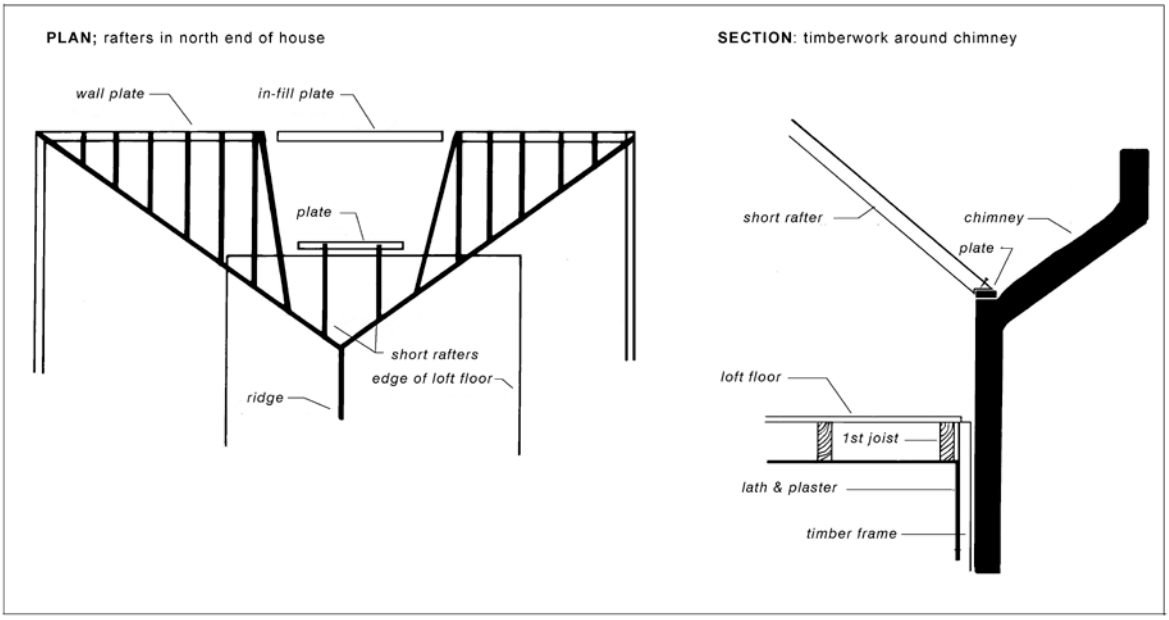



***Figure 11*** *Plan of timber elements in Culla Hill roof and section junction between the central loft and oversize fireplace in northern end of house. R. Luebbers.*

These overshoot slightly the position of the first ceiling joist so that they could not have been supported by any structure associated with the loft. The only structure which could have supported these rafters is a wall plate on the front breast of the fireplace itself. At this position, the penetration of the fireplace into the room at loft level was a full FIVE feet as measured horizontally from the inside edge of the external wall. This evidence strongly implies that the fireplace was designed to be a large walk-in style structure and is so drawn in the floor plan, with its internal surround most probably consisting of a timber frame covered in lath and plaster. The shape of the fireplace is however conjecture and must remain so until the sub-floor fabric can be assessed archaeologically or definitive historical documentation becomes available.

It should be noted that the crawl space beneath the house was blocked by modern plumbing that prevented entry at the time of this assessment. Foundation masonry that could relate to the fireplace was visible in this cavity but was too far away to be assessed.

The only historical documentation revealing the fireplace design obtained for this study is contained in Photographs 65 & 66. These images clearly show a massive stone and brick fireplace with deep penetration of the roof-line, pictures that are well supported by the fabric analysis presented here. But it raises the question of why such a large fireplace was installed in such a small floor space:- compared to the south chimney in the house and the chimneys in the other buildings at Culla Hill, this one is by far the largest and yet it opened into a moderately small room. The best explanation for this is that the chimney had more than one flue and therefore heated more than one room. The most likely functional possibilities of this design are that it was a kitchen fireplace in its own right, in which case it may have had both an oven and a cooking fire, or that it heated one or both adjoining side rooms with separate fireboxes:- corner fireplaces are possibilities. It is plausible too that a small fireplace heated the loft. It is therefore feasible that the fireplace contained up to three flues in order to heat three separate rooms;- the central room, the tiny corner room at the end of the front verandah, and the rear corner room, which may have been a kitchen. If this were the case, only one of the six rooms in the house was unheated at the time of construction and the apparent over-size scale of the fireplace is a generous adaptation for heating a 1850s rural residence.

Ceilings

With existing ceiling covering older fabric, the original ceiling finishes for the majority of Culla Hill at the time of construction cannot be described. From exposures of the upper wall finishes as viewed from the loft, intact L & P ceilings are present in the central rooms and the study, and it seems most likely that all ceilings were lath and plaster at the end of the first decade of habitation. The rendering of the upper external wall of the front verandah–a surface that was intended to include plaster– implies that a ceiling was not originally installed there. The application of the diamond pattern on the render and continuation of the verandah joists into the north-east room suggests however that the ceilings were erected very soon after construction of the building, possibly within the first year. Similarly, the plastering of the core wall above the loft entrance would seem to indicate that the loft was used for habitation rather than just storage, a conclusion that is supported by the subsequent series of wall decoration consisting first of a blue wash and then wall paper. While it is probably safe to assume a mid-19$^{th}$ century origin for this practice at Culla Hill, a precise date can only be assigned once further historical documentation becomes available. The vertical plaster slab with hair sizing at the front of the north fireplace is the only known surviving plaster from this portion of the house.

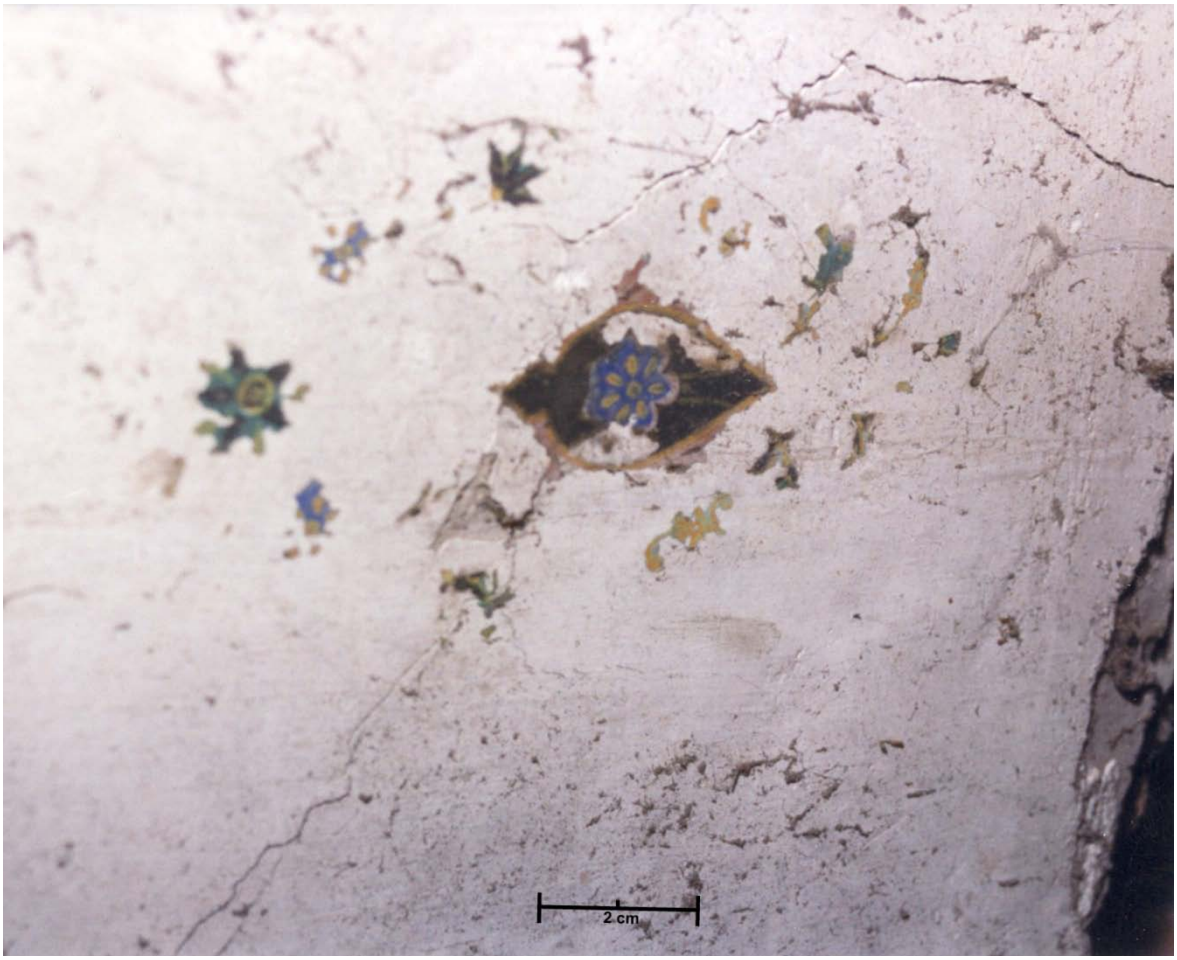
Loft

The early entry into the loft was a 1.2 x 0.8 meter rectangular opening through the “kitchen” ceiling, Floor plan C, Figure 9, accessed most probably via a pull-down or take-away ladder given that a stairway would have blocked the doorway into the central rooms. The inside surfaces of the joists and the two cross pieces that together form the frame of the opening are painted blue, the timber element paralleling the wall being light-weight trim. The blue wash on the plaster above the entrance continues down the wall behind the opening trim, suggesting that the interior wall in the kitchen may also have been decorated in this colour. This would imply that the loft could be viewed from the floor below. With the north-south orientation, the loft opening gives direct access to the side loft, entry into the central loft requiring two steps up over the core wall after first making a left turn from a timber landing at ceiling height. Other than to observe that the entrance frame appeared to be nailed together and is now filled with new timber, no special attention was placed on its assembly details.

The blue wash on the side loft wall is entirely consistent with mid-19$^{th}$ century practices, and on stratigraphic grounds was the first wall finish applied to the loft. The analysis of the bright pastel colours and the distinctive pattern of the wall paper by Phyllis Murphy confirms that it too was probably applied in the early to mid- 19th century, the period Thomas Sweeney was head of household. The decoration of the loft in this manner suggests that the side loft was inhabited from its earliest days and this conclusion finds support by anecdotal information passed on by a succession of Sweeney descendants, as conveyed by Peter Cuffley (1997 pers com). There is no evidence of lining of the cavity anywhere in the lofts. The two lofts increase the floor space of the house about 30% of the total habitation area of the house.

Wall Decoration in Loft

Only the plaster of the side loft survives sufficiently to describe interior wall finish, and a part of it to the south of the ceiling entrance over the former nursery is missing owing to complete wall renovation. However north of this point, the core wall is partially rendered and for the most part is either finished in a pale blue lime wash as the first detectable finish or it is bare of any surface decoration. The exception are tiny patches of wall paper, Photograph 72, with medallion and floral motifs printed in pastels and a dark pigment on the upper external surface of the core wall above the original entrance hole to the loft. The paper adheres to the blue wash. Samples of this paper, as assessed by architect and restoration expert Phyllis Murphy (pers. com. August 1997), are typical of the mid-19th century, probably no later than c. 1860. An application date for this paper remains unknown at this time.




***Photograph 72*** *Wall paper fragments on plastered wall over loft entrance. The scale is approximate.*

# 6 Ethno-history

The Mullum Mullum Creek at the time of Major Newman's settlement in 1838 was owned and managed by Wurundjeri clans with both traditional connections for many generations without significant influences from new immigrants. Much has been written about the conflict arising from the clash of two cultural traditions and the competing land use strategies involved in early colonial settlement (Clark 1998, Berndt & Berndt 1993, Barwick 1998) that often resulted in warfare (Reynolds 1995, Coates 2006, Conner 2002, Attwood and Foster 2003).

According to linguistic and ethno-historic research (Barwick 1984, Clark 1990:379-386), four Aboriginal clans of the Woi Wurrung language group inhabited the Maribynong and Yarra River water sheds in the early 19th century. A dialect continuum formed with their southern neighbours on the coast, the BUNWURRUNG, and the DJAB WURRUNG in the north, suggesting shared traits in language, subsistence practice, and exchange systems encompassing much of the catchment of central Victoria. A patrilineal system of descent governed social and political relationships over this area and a moiety system of Waa (crow) and Bungil (eagle) into which membership was gained at birth was a distinctive feature of social organization. Four major clans and adjacent subclans are recognized within the WOI WURRUNG area according to natural geographic boundaries: the Gunung Willam Balug and the Talling Willum (Clark 1990:382), the Kurung Jang Balug, the Marin Balug, and the Wurundjeri Balug, which Clark (1990:384) further divides into the Wurundjeri Willam and the Bulug Willam.

The available documentary evidence from which to reconstruct social and economic interaction across the area is highly fragmentary, with the identity of individual personalities and their influence in governance, ceremony, organizational framework, and subsistence enterprise remaining sketchy for the early years of European contact. Subsequent dispossession and social fracture altered the cultural landscape, probably reconfiguring exchange systems and limiting the transfer of traditional knowledge. For these reasons, it is difficult from existing historical account to name individual groups of the Woiwurrung who claimed ownership of Pontville land or to describe from firsthand knowledge the cultural significance of Mullum Mullum Creek to any specific group. It is clear from any number of in-depth research of contemporary Aboriginal aspirations in colonial Melbourne that cultural traditions, while fragmented, were observed by clans of the mid-Yarra River Valley when Pontville the homestead was first occupied (see Fels 2011, Barwick 1998:20-25) in the 1840s.

Two mobs of the Wurundjeri Willam resided in the Mid-Yarra River catchment in the first two decades of immigrant settlement: Bebejan’s mob lived in the tract between Heidelberg and Yering in the upper Yarra, and Billibellary and his mob claimed an area downstream and to the west as far as Mt William near Lancefield (Clark 1990:385). Barwick (1984:122) on the other hand places the Wurundjeri Balug across this clan area, amalgamating the two sub-groups identified by Clark. Owing to the absence of geographic detail of territorial boundaries as they operated for the period, it is not yet possible to clarify this apparent discrepancy for Mullum Mullum Creek with confidence. Nevertheless, on the balance of probability, it was Bebejan’s mob and his descendants that claimed ownership of the area around Pontville. Bebejan was Ngurungaeta or headman of his people and was present to witness the signing of a "treaty" with John Batman in 1835 (Kenny 2008, Broome 2005). Wurundjeri descendants today trace their lineage through Annie Borate (Boorat), his daughter, and her son Robert Wandin.

There is an unbroken chain of legitimate contact with cultural and social tradition in the 19th century starting with Billibellary, Ngurungaeta of the Moi Wurrung until his death in 1846 (Barwick, 1984:124). His role in the manufacture and trade of green-stone axes from Mt William quarries gives a glimpse of the vast trading and exchange network that operated across much of Victoria and neighbouring areas of New South Wales and South Australia at the time of Contact (McBryde, 1984, 1986). He appointed his son Simon Wonga, one of the founders of the Coranderrk Aboriginal Station to be his successor (Fels, 1989, Barwick 1984). His cousin and the son of Bebejan, William Barak, (1824-1903) also rose to public prominence in the last half of the 19th century as an advocate and spokesperson of the Wurundjeri-Willam in their plight in seeking social and political justice at the station, as well as a renowned artist (Lydon 2003, Sayers 1994). Although there may have been other parallel but unnamed clans in the last one and a half centuries, many descendants of Barak's clan today maintain strong cultural and spiritual affinity to their country in the Yarra River catchments described in this report (see Ellender and Christiansen 2001). Current state legislation for the protection of Aboriginal heritage reflects the commitment of

Indigenous interests in maintaining connection with country through the formation of decision making bodies to manage their heritage in culturally appropriate ways. As expressed through legislative arrangements under the *Aboriginal Heritage Act* (Vic) 2006, the Wurundjeri Tribe Land & Compensation Cultural Heritage Council Incorporated are the Registered Aboriginal Party(RAP) for Pontville and its surrounding area.

# 7 DISCUSSION

## 7.1 Introduction

This study of Pontville relies on historical documentation of Newman's settlement in the mid-Yarra River Valley to develop a construction and renovation history of the homestead from the first decade of colonial government onwards. With that chronology established, the fabric analysis forms the basis for assigning dates of manufacture for the nails and other materials used in a founding residential building in colonial Victoria that will contribute to a better understanding of contemporaneous Australian architecture. The archaeological investigation has also provided unparalleled insight into the impact the construction of the homestead had upon existing Indigenous heritage and to speculate on the likely layout of the original homestead precinct at Pontville. This discussion aims to provide an opportunity to date some of the materials incorporated in a rural property in the mid-Yarra River Valley at various times in the past and hence to comment on the local and global markets that fed a fledgling agricultural industry from the perimeter of is largest population centre.

## 7.2 Aboriginal Occupation

The site of the Pontville home precinct offers strategic advantages for the subsistence aspirations of both hunter-gatherer and farmer alike. It is elevated above a once in one hundred year flood level of the Yarra River and yet sits only meters away from permanent water in Mullum Mullum Creek in easy reach to keep the household garden alive. The river is a known eel migration route that at the confluence provided ideal circumstances for setting up traps as the fish left the creek on their journey to the sea. This is a preferred location chosen by Aborigines to build fish traps right across central Victorian drainage systems. It overlooks a wetland marsh only 100 m meters further up stream where water birds nest and aquatic fauna seasonally congregate--rare resources for the otherwise narrow riparian habitat of the creek as a whole. This is an ideal and possibly unique microhabitat to camp and pursue subsistence activity because it is here that biological diversity in the tributary is the greatest for any family seeking self-sufficiency.

The stone implements recovered in mortar from the original surface beneath the house are contemporaries of house construction and can reasonably be dated to the early 19th century, although exact co-habitation is unlikely. These represent tool sharpening and spear manufacturing activities that characterize Aboriginal technological enterprise immediately prior to European settlement of the Yarra River Valley. It is plausible that Newman knew or was in the company of the Wurundjeri families that had camped and discarded these tools previously on the upper banks of the creek in the footprint of the Pontville homestead. These physical remains demonstrate a preference for the same plot of land and provide the background for the frontier conflict that marked colonial settlement patterns across Victoria. In delineating the trajectory undertaken by both sets of owners, competition for natural resources may have been worked out between Wurundjeri clans, but succumbed to hostility and revelry with the arrival of new immigrants lacking in consultation skills and unaware of generations of custodianship and inheritance. The nature of the conflict that follows must also recognize the likely spiritual aspect bestowed by the geology of the setting and denial of access to places of special cultural significance resulting in the imposition of a new land use strategy that by definition excluded competition from existing human residents.

The cultural issues of adaptation in the mid-Yarra during the 1840s necessarily involves maintenance of exclusive access of land to control resources with the following consequences.

- Newman's fencing restricted access to the confluence of the Mullum Mullum Creek.
- Eel traps excised from traditional use of subsistence resource available to Wurundjeri.
- Violation of cultural value systems in play with landscape features of the creek, renewal of creation and fertility cycles denied, high value sites compromised by introduction of domestic stock, spiritual connection broken, means of livelihood removed from traditional practices.
- Compromise of the resource and spiritual base of the Mullum Mullum Creek to the mid-Yarra Valley tributary system in Wurundjeri culture.
- Fragmentation of traditional social custom.

## 7.3 Pontville Construction and Renovation Sequences

*Original Construction-1843-44*
Fabric analysis shows that the original form of the Pontville homestead consisted of a five room bungalow style brick structure with a core of three central rooms that rose to a loft and opposing end rooms that were separated by identical verandahs. Continuation of the upper brickwork at the junction of the core rooms with the end rooms and the ashlar exterior finish indicate that a single pitched roof was present at the time of initial occupation. A white lime wash or render applied to the exterior faces of the stone footings appears to be designed to create an imposing statement of the homestead rising prominently above a hummock in the dense Eucalypt woodland of the mid-Yarra River Valley. It is reasonable to interpret the presence of both fresh and used shingles secreted in the loft in association with zinc alloy nails as demolition residue of the first roof, although no fabric survives *in situ* to prove it. The loft most probably was lit by dormer windows but fabric proving this is now also missing with the loss of most of the original roof structure. Three fireplaces warmed the homestead through chimneys at opposing ends. Although the original floorboards do not survive, it is surmised that they were fixed to pit-sawn joists by square shank nails, with the joists resting either on or near ground level through insert holes in opposing wall masonry. Based on analysis presented here, there is no case for extensions of the loft, additions of end rooms or any other alternation visible in the extant layout that was not present at the original construction of the homestead in 1843-44.

*Renovations*
The only alterations undertaken during the Newman occupancy pertained to upgrades to the roof and floorboards, and possibly window surrounds. Slates replaced the shingles at the end of the first decade of use before the major and his wife left their farm and their offspring became occupiers and managers and the property was affectively subdivided with the construction of Monckton in the period 1853-55. High quality wall paper was stalled soon after construction and upgraded at least once subsequently during the Newman residency. The house for the first decade of occupancy reflects the tastes and aspirations of a family with some affluence that draws from a wide global market.

The shingles were fixed to softwood battens by zinc alloy nails which were driven home and clinched. The battens were fixed to rafters by either hand-made square neck Type 2 machine made nails or by an early Ewbank nail. The removal of the shingles and installation of stronger rafters and battens was required to support the extra weight of the slates. This renovation probably resulted in the loss of some timber elements from the first roof, especially where clinching prevented easy removal. Hence the large number of bent nails in the floor cavity. This sequence began with the square wrought nail and the second of slate was completed with an early Ewbank that had entered the Victorian market in the interim. The maker of the first nail types cannot be determined but they may have been ordered directly from the supplier on one of Newman's many trips to Van Diemen's Land. Similarly, the Victorian market was being flooded by Tasmanian sawmill products and softwood products were being sought as early as 1840 (see Lewis). The wood species of the battens and shingles in the collection should be established to examine this point.

*Pontville construction sequence*

- Single pitched roof throughout
- Enclosed end rooms attached to three core rooms initially
- Roof renovations involved different nail sequences
- Shingles than slate in the first decade and a half
- Nail types reflect diversity of manufacturing techniques in market from construction onwards.

The last dot point warrants further comment as this diversity of nail type does not include the Ewbank nail that dominated the fixing assemblage in the Australian market in the 19th century. The nails used in the original construction are the square shank that are either cut or are cut and rolled varieties that differ from the rolled Ewbank, although their manufacture are most probably contemporaneous in the English market. The Ewbank at Pontville are found *in situ* in roof battens and rafters but are not in a fixing position to unequivocally assign to the original construction. In the case of the battens, the evidence of empty nail holes suggests reuse and accordingly the batten itself is not necessarily from the first roof. It is possible the Ewbank nail was used in renovations after the first decade of habitation, but it is uncommon in the assemblage collected either loose or *in situ* from the homestead. It is significant then that the Ewbank nail is the preferred fixing nail in Culla Hill, which is believed to have been built in the mid-1850s just 1 kilometre away in Eltham. This evidence sug-

gests that the Ewbank was not adopted in the mid-Yarra River Valley until the 1850s, one and a half decades after it entered the English market.

## 7.4 Dating the Extant Kitchen

The fabric analysis has established that bricks in the detached kitchen first came on to the Melbourne market in 1882 with the development of the Hoffman kiln that made bricks more affordable for the first time. The roofing iron and nails were first made in the late 19th century, as too is the practice in the construction industry of using stumps to support timber frames in rural structures. The kitchen represents a departure from a family run farm to one involving a greater role for kitchen, laundry, and bathing function that is more typical of a larger work force, possibly seasonal or transient in nature. From this perspective, the kitchen appears to be a modernization or upgrade in farming strategies arising during a period of greater prosperity for primary producers in Victoria generally before the great depression of the 1890s when some pastoral properties were abandoned and the agricultural industry contracted throughout much of rural Victoria. Construction of the kitchen is estimated to have taken place between 1882 and 1890 when the farm was owned by Charles Newman Newman but quite possibly was leased out for the remainder of his ownership.

Demolition typically leaves behind a debris field that becomes mixed with subsequence site development and daily habitation activity. The dispersal pattern of slate fragments observed around the homestead in this study extends up to the perimeter of the fenced security fence, most probably resulting from replacement by a corrugated iron roof in the first decade of the 20th century. Significantly, no slate fragments were located beneath the extant kitchen, suggesting that it was built prior to the roof upgrade, which on the basis of manufacturing dating of the corrugated iron could not have occurred prior to 1909 when it entered the Australian market. This evidence supports the conclusion that the kitchen was a late 19th century addition that occurred prior to the introduction of a CI roof on the homestead.

## 7.4 Site Layout

Pontville buildings from the beginning would have included the homestead, a detached kitchen, a stables, a dairy for family use, and various minor structures for chickens, possibly pets, and a toilet. Stock yards were already present on the western side of the creek in 1840, prior to construction of the main homestead itself. The south garden and adjacent orchards most likely provided vegetables and fruit for household consumption that allowed –along with cheese, milk and butter from the dairy, and mutton from the farm – a degree of self sufficiency needed by a family living so far away from existing markets. The planting of Hawthorne hedges helped define paddock boundaries and mulberry and fruit trees supplied the household and gives testimony to a commitment to farm development by both parents in the household. It is likely that these developments were carried out over the first decade or so of habitation at Pontville. It is valuable in light of the farm chronology in this discussion then to speculate on the layout of the farm at various times when the Newman family were resident at Pontville.

*Sheep Yards and Early Habitation*

- The earliest record of the Newman habitation plotted by Hoddle in 1843, reveal sheep holding paddocks and yards west of Mullum Mullum Creek on allotment 1, but no exact reference of the location of the turf huts built in the early settlement of Pontville.

- The only contemporary reference describing the location of the Newman huts indicates the habitation was near rapids (Robinson, August 1840). Rapids are present adjacent to allotment 4 that also are clearly visible upstream on the Yarra River from allotment 2. It is more likely that Newman established his first residency close to his stock yards in order to keep an eye on his flock and to protect his infrastructure. Although both parcels of land are probable sites of the huts, it is more likely that the farm layout was developed first with the construction of the homestead following abandonment of his temporary dwellings and that the huts were located near the river on grounds that became Monckton in the 1850s. The siting of the homestead would appear to be a strategic move to gain a commanding view of the property while avoiding impacts from flooding. While inhabiting west of the Mullum Mullum Creek, the family was not in need of a crossing point to get to market or attend to stock needs, It is clear that the bridge crossing of the creek was an integral development connecting the four parcels of land, and the farm to markets beyond the mid-Yarra River valley. The name place of Pontville, historically always first involved a bridge and the farm and bridge became Pontville.

The archaeological evidence of the first Newman hut habitation may be buried, or severely dispersed. The only identifying materials will be a stone chimney foundation, habitation debris that either littered the floor, or accumulated outside near temporary structures such as toilets, a primitive dairy, or livery. Discovery of these remnants would provide highly valuable information about an early colonial settlement layout of significance to the State of Victoria.

*The First Detached Kitchen*
The archaeological investigation demonstrates that the extant kitchen is not a part of this development and in fact was not the site for the first kitchen on the following grounds.

- There is no demolition material that predates the 1880s beneath the kitchen
- There is no underlying structures or fill that are not associated with the extant kitchen
- The two roomed kitchen is not a direct replacement or extension of an existing building that has been incorporated in an upgrade.

Where then was the first kitchen located? In general terms the answer to this question can be forecast from contemporary Australian farm layout . It will be within ten paces or so of the homestead for ease of access by occupants and it may be a weatherboard structure (see Sweeney's kitchen photograph this report) with lightweight posts and a shingle, a bark, or lead roof. Or instead it had stone footing supporting upright timbers as the main frame.

Noteworthy in the design of Pontville is its symmetry on both its long and short axis. This symmetry and the decorative finish of ashlar lines on wall render of both verandahs and white wash on the stone footings suggests that presentation of the homestead was important to either a front or a rear perspective without requiring structural changes to the building itself. The front and back of the house could then be switched by owner preference with little significant renovation. It is accordingly plausible that the original orientation of the yards was reversed with the construction of the extant detached kitchen represents an alternate use of home precinct and that the original kitchen was located in what is now the front yard. If this is the case it is either buried beneath fill introduced in the mid-1950s or its remains have been removed from this location by latter occupation.

*Other Buildings*
The following structures were also present in the Pontville layout in the first decade of occupation.

- The stables or similar large outbuilding would have been a major structure on the station, possibly built in stone and located in a roadway giving access to the home precinct, but set tens of meters away within eyesight. Built in 1845-47, probably demolished in the 1920-30s as surplus to the farm's dairy operation, no testimony survives to indicate where this farm building was located or suggests its layout. Suggested locations are given here in light of surface deposits detected by survey.
- Dairy: typically a pre-requisite in family oriented colonial settlement: location unknown but should be close to herd and water, probably primitive, small enough for household consumption. May be located near extant dairy.
- Discovery of this early farm layout is an important contribution to regional and state heritage management.

## 7.5 Implications of Nail Assemblage for mid-Yarra River Valley

Pontville was built in the mid-1840s at a time nail making in Britain was in transformation as machines replaced manual production methods. Some nails used in the homestead were processed by machines and appear to have manually formed heads. Found within contemporaneous construction contexts, both hand-made and machine assisted nails were used to fasten timber elements of the roof and create the lath and plaster ceiling of the Pontville homestead. Although the specific implications of this diverse manufacturing history requires more detailed study from dated Australian colonial fabric to fully explain, the Pontville evidence illustrates a mixture of nail types that most probably are being manufactured by Cordes and Co and its market competitors prior to its dominance in the global market. The Australian colonies at the time were also experiencing significant shortfalls in supply created by high rates of loss of cargo at sea that may have interrupted building projects and fragmented supply lines. Under these circumstances, builders were forced to scrounge for any quantity and source that was available until shipping merchants were resupplied. Identification of the manufacturers of these nails will help establish commercial links

between colonial Victoria and the wider global market but can only be achieved with future dating programs from architectural fabric in both Britain and Australia. Some consideration should also be given to Australian manufacture, especially convict labour and the access by colonial builders to the Kings Stores. Tracing these nails to a specific manufacture may be difficult if they are operating without patents or are attempting to avoid breaches of patents by slight adjustments in equipment design. Research of these sources will give valuable insight into the development of the late phase of the Industrial Revolution and Newman's access to it from the mid-Yarra River Valley.

## 7.6 Other Research

Implications to market links should be researched using the artefact inventory to verify the following.

- Timber species identified to source forest
- Were all nails imported or locally manufactured?
- Wall paper analysis to further date and source
- Slate analysis--is this Australian or Welsh slate?
- Was lime for mortar sourced as natural rock or shellfish?
- Hearthstone identification as to source.
- Can sand in mortar be traced to known sand deposit on the Pontville property?

# 8 RECOMMENDATIONS

This report makes the following recommendations for the protection of Pontville heritage:

1) Within the Security Fence;-

a) No works involving ground disturbances should be allowed to take place without first being assessed by a qualified archaeologist. This assessment work should be considered an archaeological investigation in its own right and not simply a monitoring exercise.

b) Works involving ground disturbance to the raised floor and renovated portion of the rear of the homestead should only be undertaken with the supervision of a qualified archaeologist in order to fully examine and assess all residues and deposits beneath the floor.

c) Future archaeological investigation should attempt to discover the significance of several features in the precinct. These are:

- The line of hand-made bricks near the south garden,
- The underground rainwater tank between the house and the Cypress tree,
- The 19th century brick foundations in the south-west corner of the house, as shown in the Site Plan, Figure 2,
- The artefacts and associated building fabric in the south-west corner of the house,
- The residues, architectural fabric, and deposits beneath the raised timber floor under the rear verandah of the homestead. The mortar floor itself may date to the 1840s and should be fully protected in any site works.
- The residues, architectural fabric, and deposits beneath the extant floor in each of the three core rooms of the homestead.
- A materials conservation program should be developed and funded for all artefacts and other fabric retained for future reference.

d) The location of the original detached kitchen should be determined by archaeological investigation, with consideration of the "front" of the homestead being included in the search area.

e) Additional excavation of the sandstone foundation of the homestead should be undertaken aimed at describing possible decorative exterior render.

2) Outside the Security Fence:-

a) The significance of the stone ruins and retaining walls 55m north of the house should be investigated by archaeological excavation to determine its extent and function. No development or ground disturbances should be allowed to take place within a 15 m buffer of these ruins and stone rubble without first undertaking this work.

b) The old mulberry tree near the Yarra River should be preserved as far as possible and should not be removed while it is alive.

c) The location of the late 1830s huts erected by Newman should be determined, with consideration being directed to the banks of the Yarra River in allotments 1 & 2 west of Mullum Mullum Creek.

3) Laboratory

The fabric collected from Pontville remain valuable clues to the building trade links established between homeowners and suppliers for colonial Victoria that should be further investigated. The forests of Tasmania were the most popular source of building timber for the first two decades of Victorian settlement and considerable effort was taken to exploit both hard and soft woods for export to the mainland as well as New Zealand. Similarly, American and New Zealand materials were flowing into Australian ports before Batman declared ownership of property on the Yarra River. Knowing which of the sources was actually incorporated into mid-Yarra River Valley residences is critical information for defining the commercial pathways employed for the time period of initial settlement.

a) The species of all timber building elements in the sample inventory should be identified to establish likely market sources. This should include the original front door frame and the ceiling joists.

b) All nails in the collection should be conserved and lodged with Heritage Victoria for future reference.

c) The identification and origins of the sandstone hearths in the homestead should be determined.

## REFERENCES


Attwood, Bain & S G Foster. 2003, Frontier Conflict: The Australian Experience, National Museum of Australia.

Barwick, Diane, 1998. Rebellion at Coranderrk. *Aboriginal History Monograph*, pp 1324-7018,. Canberra.

Barwick, Dianne, 1984, Mapping the past: an atlas of Victorian clans 1835-1904, Part 1, *Aboriginal History* 3(2):100-13l.

Berndt Ronald M, and Catherine H Berndt, 1993, A World that Was, The Yaraldi of the Murray River and the Lakes, South Australia, Melbourne University Press, Melbourne.

Bethell, L S, 1957?, *The story of Port Dalrymple, life and work in Northern Tasmania,* Hobart : Government Printer.

Billis R V, and A S Kenyon, 1974, *Pastoral Pioneers of Port Phillip,* Melbourne, Stockland Press.

Broome, Richard, 1988, The Struggle for Australia: Aboriginal-European Warfare, 1770–1930, In McKernan, M. and Browne, M. *Australia Two Centuries of War & Peace*. Canberra: Australian War Memorial.

Broome, Richard. 2005, *Aboriginal Victorians: A History Since1800*, Sydney: Allen & Unwin.

Buggey, S, & Weaver, M E, 1976, A most significant reference document: a list of nails and spikes required for the service of the office of Ordnance, In *Association for Preservation Technology Bulletin*, Vol VIII, No. 3, pp. 88-119.

Carroll, Brian & Rule, Ian (1985). Preston: an Illustrated History. Preston: City of Preston.

Clark, Ian D 1998, That's my country belonging to me : Aboriginal land tenure and dispossession in nineteenth century Western Victoria, Heritage Services, Ballarat.

Clark, Ian D, 1990, Aboriginal Languages and Clans, A Historical Atlas of Western and Central Victoria, 1800-1900 *Monash Publications in Geography,* No 37, Monash University.

Clifton Brick Company, 1935, September 6, *Preston Leader* , p6, Melbourne, Vic.

Coates, John , 2006,. *An Atlas of Australia's Wars*. Melbourne: Oxford University Press.

Connor, John 2002,*The Australian frontier wars 1788-1838*, University of New South Wales Press, Sydney.

Context Pty Ltd and Nigel Lewis Richard Aitken Pty Ltd in association with C. Kellaway, and I. Ellender, Pontville, 1995, Cultural Significance and conservation policy, report to Melbourne Parks and Waterways and City of Manningham.

Cooper, Nora, 1940, "A Home with a History", in *The Australian Home Beautiful,* Feb. 1, pp 6-9, 49-50, United Press, Melbourne.

Crockett, David, Cheryl Crockett and Hazel Poulter, nd. Major Charles Newman First Permanent Settler of Templestowe, typescript pp 1-85, supplied by Mr Jim Poulter.

Cuffley, Peter, 1993, *Australian Houses of the Twenties and Thirties*, Five Mile Press.

Cuffley, Peter, 1996, *Cottage Style in Australia.* The Five Mile Press, Noble Park, Victoria.

Cuffley, Peter, 1997, Thomas Sweeney (1803-1867), typescript notes prepared for family history by Thomas Sweeney's great great grandson.

De Serville, Paul, 1980, *Port Phillip Gentlemen,* Oxford University Press, Melbourne.

Edwards, Jay Dearborn and Tom Wells, 1993, Historic Louisiana Nails: Aids to the Dating of Old Buildings, The Fred B. Kniffen Cultural Resources Laboratory Monograph Series, No 2

Ellender, Isabel and Peter Christiansen, 2001, *People of the Merri Merri: The Wurundjeri in Colonial Days*. Merri Creek Management Committee, Melbourne.

Fels, Marie Hanson, 1988. *Good Men and True: The Aboriginal Police of the Port Phillip District 1837-1853*, Melbourne University Press.

Fels, Marie Hanson, 2011, I Succeeded Once: The Aboriginal Protectorate on the Mornington Peninsula, 1839-1840, ANU E Press and Aboriginal History Incorporated *Aboriginal History Monograph* 22.

Green, Irvine, 1982, *Templestowe, the Story of Templestowe and Bulleen,* Doncaster-Templestowe Historical Society.

Historical Records of Victoria, 1991, *The Crown, the land and the squatter, 1835-1840*, Michael Cannon and Ian MacFarlane (edits), Melbourne University Press.

How, Christopher, 2007, *Framing Evidences as an aid to dating Pioneer Buildings in the Western District of Victoria, Australia" Vol II p28 "Summaries of data obtained in the field studies & collation of research findings."*

How, Christopher, and Miles Lewis, 2009, The Ewbank Nail, Proceedings of the Third International Congress of Construction History, Brandenburg University of Technology, Cottbus. II: 829-836.

Irving, Robert, 1985, The History and Design of the Australian House, Oxford University Press, Melbourne.

Kellaway, Carlotta, 1994, Pontville 629-657 Blackburn Road, Templestowe. consultants report to City of Doncaster and Templestowe.

Kenny, Robert, 2008. Tricks or treats?: A case for Kulin knowing in Batman's treaty. History Australia 5 (2): pp. 1 -14.

Kerr, J H, 1872, Glimpses of life in Victoria / by A resident, Edinburgh, Edmonston & Douglas.

Lemon, Andrew, 1983,The Northcote Side of the River, North Melbourne Vic. Hargreen.

Lewis, Miles 1989, Physical Investigation of a Building:". Technical Bulletin 9.1, Australian Council of National Trust.

Lewis, Miles, 1994, Pontville, Templestowe, Unpublished typescript report to City of Manningham.

Luebbers, R A, 1995a. An archaeological investigation of Gisborne Mains (H7822-151): a mid-19th century horse stud farm on the Calder Highway between Millett Road and South Gisborne, Victoria, Unpublished report to VicRoads.

Luebbers, R A, 1995b, Report of archaeological assessment of security fence installation, Pontville homestead, Templestowe, Victoria. Unpublished report to Melbourne Parks and Waterways.

Luebbers, R A, 1996, The archaeology of Chinamans Wells and Hacks Station, The Coorong, South Australia, Unpublished report to Department of Environment. and Natural Resources, Adelaide.

Luebbers, R. A, 1997, Proposal to excavate Pontville Homestead, Templestowe, typescript to state agencies to apply for consents to disturb.

Luebbers, R. A., 1999, Archaeological Survey of Tikalara Park, Templestowe, Victoria, unpublished report to Parks Victoria.

McBriar, Marilyn, 1985 , Draft Yarra Catchment Strategy, State of Victoria Department of Natural, Historic Riverland Landscape Assessment Study Part II, Loder & Bayly.

Nelson, Lee, H, 1968, Nail Chronology as an Aid to Dating Old Buildings. American Association for State and Local History Nashville, Technical Leaflet No. 48.

Oman, Charles C, and Jean Hamilton, 1982, *Wallpapers A History and Illustrated Catalogue of the Collection in the Victoria and Albert Museum, Sotheby London.*

Parsons, T G, 1970, Some aspects of the development of manufacturing in Melbourne, 1870-1890, PhD Thesis, Monash University, Dept of History.

Peterson, Richard, 1994, Plan of Pontville, prepared for Manningham City Council.

Phyllis Murphy, 1981,"The decorated wall; eighty years of wallpaper in Australia c. 1850-1900. Historic Houses Trust of NSW, Sydney.

Poulter, Hazel, 1985, *Templestowe: A Folk History*. Templestowe: J. Poulter, edit. pp.1-55. Privately published.

Reynolds, Henry 1995*, The Other Side of the Frontier. Aboriginal resistance to the European invasion of Australia*. Ringwood: Penguin Books Australia.

Robinson, G A, 31 August, 1840, In The Journals of George Augustus Robinson, Chief Protector, Port Phillip Aboriginal Protectorate, Volume One: 1 January 1839 - 30 September 1840, Ian D Clark (ed).

Ryzewski, Krysta and Robert Gordon, 2008, Historical nail-making techniques revealed in metal structure, *Historical Archaeology* 42(1) 2008, pp 50-64, Society for Historical Archaeology.

Snelgrove, Catherine and Mark Trumble, 1993, a report on a survey at "Pontville" (H7922-122), Paddles Reserve Templestowe, prepared for Victoria Archaeological Survey Historical Archaeological Unit and Melbourne Water.

Spreadborough, Robert, and Hugh Anderson, 1983, Victorian Squatters, Red Rooster Press, Ascot Vale, Victoria.

Stuart, Iain, 1987, History of the Victorian Brick Industry, 1826-1920, *Australian Archaeology,* 24 (24) pp 36-41.

Stuart, Iain, 1989, Why Did the Hoffman Brick and Pottery Works Stop Making Bricks? *Australian Archaeology*, 7:29-34.

*The Age,* 26/8/1933, “Melbourne’s Historic Homes, VIII, two stations on the Yarra: Bushrangers and Gold.” p. 17.

Varman, R V J, 1986. “The nail as a criterion for the dating of buildings and Building sites”, in Judy Birmingham & Damaris Bairstow, *Papers in Australian Historical Archaeology* (Sydney 1987). First published in volume 10, no. 1, March 1980, p 107- 21.

Vines, Garry, 1993, *Quarry and stone: bluestone quarrying, stonemasonry and building in Melbourne's west*, Melbourne's Living Museum of the West, Melbourne.

Visser, Thomas D, 1997, *A Field Guide to New England Barns and Farm Buildings,* University Press of New England, Hanover, New Hampshire,

Wells, Tom, 1998, Nail Chronology: The use of technologically derived features, *Historical Archaeology* 32(2), pp78-99.

## APPENDIX 1-Consent Letter from Coranderrk Koori Co-operative

1 May 1997

Jill Gallagher
Manager, Heritage Victoria
Aboriginal Affairs Victoria
2/115 Victoria Pde.
FITZROY VIC 3065

Dear Ms Gallagher,

This letter is to confirm that the Healesville and District Aboriginal Co-operative Ltd. has read the proposal to excavate at the Aboriginal site of Pontville by Roger Luebbers, dated 28 May, 1997. We understand that all Aboriginal materials will be safeguarded during the course of this excavation and that Mr. Brian Patterson will be fully informed on the conduct and outcome of the investigation. We also understand that the Co-operative will receive a final report at the completion of the work.

Provided these conditions are agreed upon, on behalf of the Healesville and District Aboriginal Co-operative, I consent for this work to be carried out as proposed.

Signed

Brian Patterson
Cultural Officer
Coranderrk Koori Co-operative
HEALESVILLE VIC 3777

## APPENDIX 2 Consent to Disturb an Archaeological Site from AAV

Form C

Victoria

**Archaeological and Aboriginal Relics Preservation Act 1972**

ARCHAEOLOGICAL AND ABORIGINAL RELICS PRESERVATION REGULATIONS 1992

# EXCAVATION PERMIT

**Dr Roger Luebbers**

of

28 Woodlea St, EAST DONCASTER VIC 3109

is authorised to disturb or excavate the land described below for the purpose of uncovering or exposing any relic or excavating any relic.

The land is described as the Pontville Homestead, which is situated within the Parish of Bulleen County of Bourke and shown hatched on the accompanying map.

The Aboriginal Affairs Victoria registration number for the site is 7922 - 539.

This permit is valid from **30 April 1997** to **30 May 1997** and is issued subject to the attached terms, conditions and limitations.

Dated: 30 April 1997

for Minister

Page 1 of 4

## APPENDIX 2 Consent to Disturb an Archaeological Site from AAV

Victoria

**Archaeological and Aboriginal Relics Preservation Act 1972**

ARCHAEOLOGICAL AND ABORIGINAL RELICS PRESERVATION REGULATIONS 1992

# EXCAVATION PERMIT

### Standard Conditions

1. The permit does not abrogate the holder's responsibility to obtain the permission of the owner, occupier and/or manager of the subject land and to obtain relevant permits and/or consents from government authorities.

2. The permit is conditional on the consent of the local Aboriginal community being obtained in accordance with Section 21U (4) of the *Aboriginal and Torres Strait Islander Heritage Protection Act* 1984.

3. The permit is valid only for the time period, land and site described in the application.

4. The permit can be renewed providing there has been compliance with the conditions of the permit up until the renewal application.

5. The permit cannot be transferred or assigned.

6. In cases of illness or other circumstances which may prevent the undertaking of the excavation, the Minister may agree, on application, to suspend the permit provided that the suspension does not result in any variation of the applicant's ability to undertake the work outlined in the application.

7. An officer of Aboriginal Affairs Victoria, or an Inspector acting under the authority of the *Archaeological and Aboriginal Relics Preservation Act* 1972 may at any time inspect the works undertaken or relics recovered under the permit.

8. The permit can be revoked at any time at the discretion of the Minister.

9. The holder of the permit shall, within 6 months of completion of the excavation or expiry of the permit (whichever is the earlier), submit to Aboriginal Affairs Victoria an interim report of the results of the excavation.

10. The holder of the permit shall, within 6 months of completion of the excavation or expiry of the permit (whichever is the earlier), lodge with Aboriginal Affairs Victoria a copy of all excavation notes, plans, section drawings and relevant photographs relating to the work carried out under the permit, to form an archival record in the event that the originals are lost or destroyed.

11. Copies of all work based on the results of the excavation for which the permit was issued should be submitted to Aboriginal Affairs Victoria for lodgement in its archive/library.

12. The permit holder must agree to indemnify the Minister and the Crown against all claims in connection with the permit.

APPENDIX 2 Consent to Disturb an Archaeological Site from AAV

Victoria

**Archaeological and Aboriginal Relics Preservation Act 1972**

ARCHAEOLOGICAL AND ABORIGINAL RELICS PRESERVATION REGULATIONS 1992

# EXCAVATION PERMIT

## Special Conditions

1. The disturbance of the land is to be limited to:

   (a) the excavation of a maximum of 9 excavation pits in accordance with the attached plan, to a maximum depth of 60 cm.

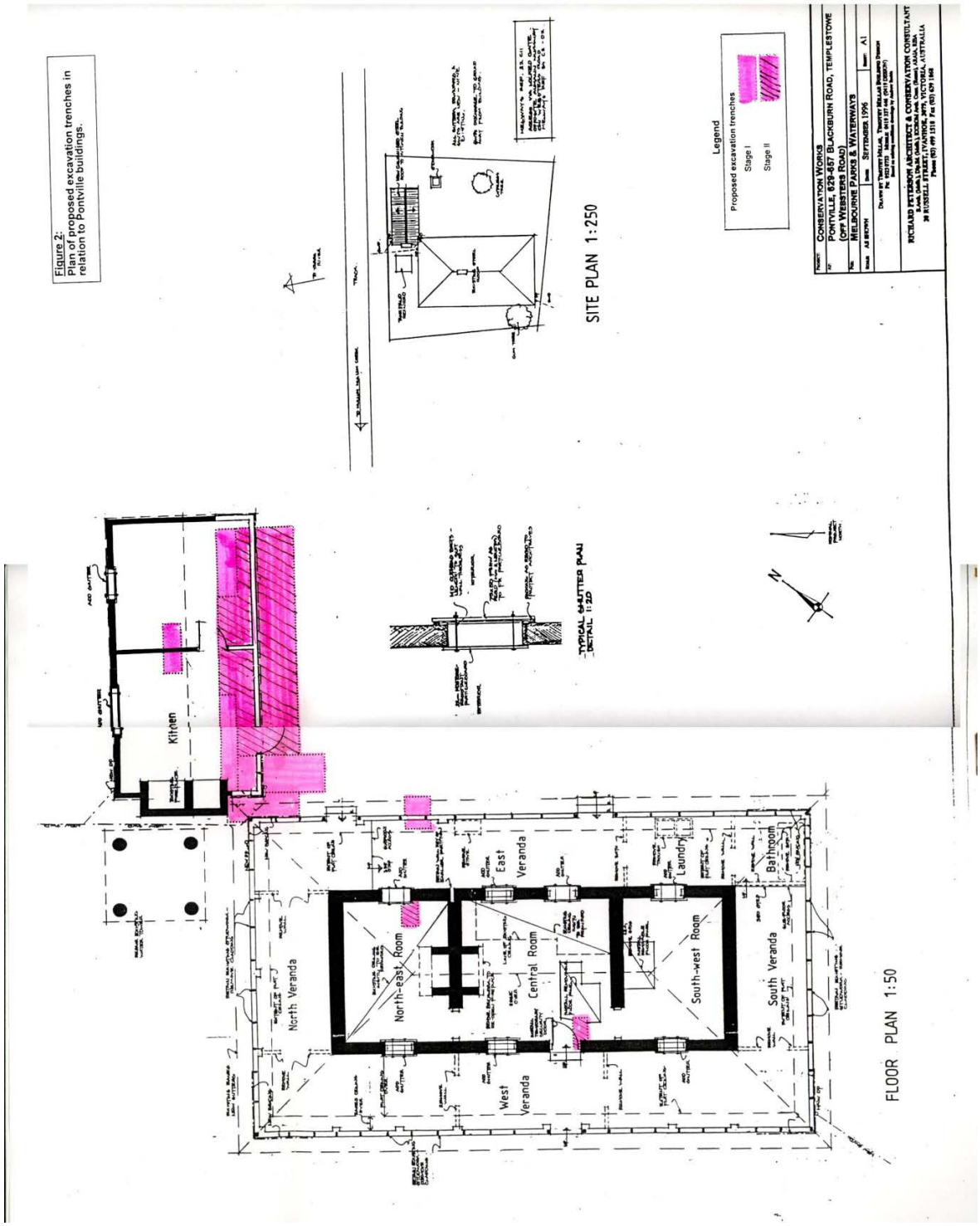
2. If considered necessary, further excavation may be carried out. This work is to be limited to two excavation pits to a maximum depth as described above.

3. Aboriginal Affairs Victoria site record cards (Forms E or G) are to be completed for all sites and/or occurrences of artefacts discovered as a result of the excavation. These cards are to be forwarded to the Site Registrar, Heritage Services Branch as soon as possible after the completion of the field work, and within a maximum of 30 days.

4. The location of each excavation pit is to be recorded accurately, along with details of any exposed stratigraphy. This information is to be provided to the Site Registrar, Heritage Services Branch as soon as possible after completion of the field work, and within a maximum of 30 days. Please note that this requirement applies whether or not any cultural material is found during the excavation.

5. The holder of this permit shall ensure that the site is properly restored and stabilised following the excavation, to the satisfaction of the owner/manager of the subject land.

Page 3 of 4




## APPENDIX 2 Consent to Disturb an Archaeological Site from AAV

## Appendix 3: Consent to Disturb an archaeological Site, Heritage Victoria

# CONSENT

HERITAGE ACT 1995

CONSENT NO: **CE 97-6**

OWNER: **Parks Victoria**
ADDRESS: Westerfolds Park
PO Box 568
TEMPLESTOWE VIC 3106

Heritage VICTORIA

SUPERVISING ARCHAEOLOGIST: **Dr Rogers Luebbers**
ADDRESS: **28 Woodlea Street**
**East Doncaster VIC 3109**

HERITAGE INVENTORY NO: **H 7922-122** FILE NO: 600539/2
501676/3

NAME OF SITE: **Pontville**
LOCATION: Situated with in the **Parish of Bulleen, County of Bourke**

Pursuant to Section 129 of the Heritage Act (1995) and in respect to the above-mentioned site/relic, the Executive Director, Heritage Victoria hereby grants a CONSENT to **Parks Victoria** subject to conditions as prescribed hereunder to carry out the following:

*Excavation of subsurfaces deposits as indicated on the attached plan*

**CONDITIONS:**

1. This consent is valid from **5 May 1997** to **5 May 1998**
2. This consent does not abrogate the holder's responsibility to obtain the permission of the owner, occupier and/or manager or the subject land and to obtain any other necessary permits and/or consents from government authorities.
3. The consent is valid only for the site described in the application.
4. A further consent for these works may be issued on application, at the expiration of this consent, provided there has been compliance with the conditions of this consent up until the new application. (Note that the consent application fee may be waived in this instance).
5. The consent cannot be transferred or assigned.
6. An officer of Heritage Victoria, acting under the authority of the *Heritage Act 1995*, may at any time inspect the works undertaken or relics recovered under the consent.
7. The Consent can be revoked at any time at the discretion of the Executive Director.
8. Any portable relics recovered during the exercise of this consent are to be immediately reported to Heritage Victoria.

Page 1 of 3

## Appendix 3: Consent to Disturb an archaeological Site, Heritage Victoria

9. The Executive Director is to be informed when the approved works have been completed.

10. The excavation is to be supervised by a suitably qualified and experienced archaeologist at all times.

11. The holder of the consent shall, at the completion of the work or the expiration of the consent, whichever is sooner, lodge a copy of all excavation notes, plans, sections and relevant photographs relating to the work carried out under the permit, with Heritage Victoria to form an archive in the event that the original notes are accidentally destroyed.

12. One bound copy and one unbound copy of the excavation report must be submitted to the Senior Archaeologist, Heritage Victoria, Department of Infrastructure, PO Box 2240T, Melbourne, 3001.

13. The Archaeologist conducting the excavation undertakes to abide by the standards and guidelines practices and procedures for excavating in Victoria as indicated by Heritage Victoria.

14. The principal archaeologist undertakes that all persons working on the site understand their archaeological obligations as laid out in the standards, guidelines, practices and procedures of Heritage Victoria and follows them.

15. The findings of aboriginal archaeological remains must be reported to Heritage Victoria and Aboriginal Affairs Victoria Heritage Branch as soon as possible.

16. Any portable relics recovered from the site are to be catalogued and conserved to the satisfaction of the Conservator, Heritage Victoria.

17. The excavation shall be limited to the area indicated on the plan of the site.

18. Where, in the opinion of the supervising archaeologist, any works under this consent are destroying an archaeological deposit the supervising archaeologist may require works to cease to enable the assessment or salvage of the archaeological remains to be completed.

19. If after two years of receipt of the final report the supervising archaeologist has not published the material, Heritage Victoria reserves the right to publish the findings of the archaeological investigation.

20. When written material is published by the supervising archaeologist regarding the subject of this consent, they shall provide Heritage Victoria with a copy of the publications.

21. Any person for the time being exercising the authority of this consent must produce it for inspection when required to do so by any member of the police force or by any person appointed as an inspector under the Act.

**TAKE NOTICE THAT ANY NATURAL PERSON WHO DOES NOT COMPLY WITH THE TERMS AND CONDITIONS CONTAINED IN THIS CONSENT IS GUILTY OF AN OFFENCE AND LIABLE TO A PENALTY OF UP TO 50 PENALTY UNITS ($5,000) OR IN THE CASE OF A BODY CORPORATE 100 PENALTY UNITS ($10,000).**

**THE ATTENTION OF THE OWNER AND/OR APPLICANT IS DRAWN TO THE NEED TO OBTAIN ALL OTHER RELEVANT PERMITS PRIOR TO THE COMMENCEMENT OF WORKS.**

*Copies to:Dr Roger Luebbers*
*Richard Peterson*
*

HERITAGE VICTORIA
GPO BOX 2240T MELBOURNE 3001

Signed .....Executive Director

Date 7/5/97

Page 2 of 3

## Appendix 3: Consent to Disturb an archaeological Site, Heritage Victoria

Heritage
VICTORIA

# CONSENT

HERITAGE ACT 1995

**Consent No. CE 97-6**

**Plan of Site**

*Hatched area indicates relic to be excavated*

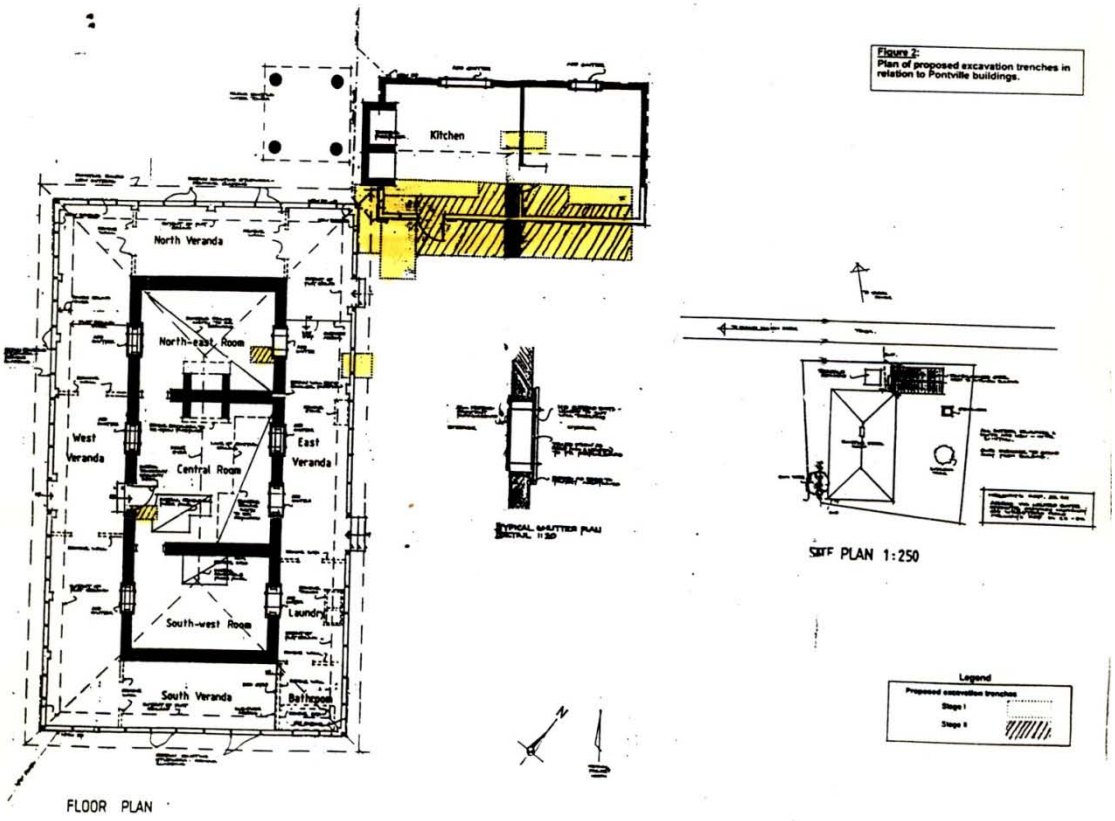



Figure 2:
Plan of proposed excavation trenches in relation to Pontville buildings.

**Appendix 4** Diary entry, G. A. Robinson, 31 Aug. 1840 relating to Major Newman's quarters.

Took breakfast with Messers Dawson [James Dawson] and Selvy [James Selby]. Their wives and children were with them. They were living in a small hut. Young Scot was staying with them. Scott junior is a son of Lieutenant Scott of the marines. Dawson had been in Canada. His wife is a niece of Mungo Park, the celebrated traveller, so Dawson her husband says. Mrs Park, Mungo's widow, died but a short time since. Dawson says she was not a very old woman by any means. These two persons are living together for mutual protection, they came out together. It is a very small Run. Dawson says a settler told him how he kept blacks away from his place: he set them to work and promised them a good reward and when they had done he sent them away and would not give them anything. This is a specimen of what refined civilized improvement can do. Is [it] to be wondered if these poor people retaliate? Rode on passed Anderson and next came to Major Newman. Rode round the country in the neighbourhood of Major Newman's. Major Newman was at home, also Mrs Newman and some of her family and a Mrs Roberts. They were living in a misserable [*sic*] hovel on the banks of the Yarra. At this part of the river there was a broad bason [basin] and a fall or rapid. Opposite to his hut he was building a new sod hut but it was a miserable attempt at a building. Major Newman came last from VDL. He had a farm of 200 acres at Black Brush, River Jordon. He quarrelled with Roper of Brighton and also with government. He had an Indian cow on his station and some good bred cattle he brought from VDL. His sheep were deceased [diseased?]. He pressed me to remain for the day. It rained excessive all this afternoon. Major Newman served in the Indian army. Thomas went on to the native camp at Bolin and to tell the natives of the place up the Yarra for station.

## Appendix 5 Inventory of Pontville Reference Sample Collection

| No | Description & Context |
|---|---|
| S1 | Mortar pavement collected *in situ* from below timber floor, E. verandah. Contains sand of angular clear and white quartz , clay and lime inclusions, two dark sand types not identified. Top surface wood floated. |
| S2 | Render taken *in situ from* upper wall line, central room. |
| S3 | Mortar taken *in situ* from chimney brickwork of chimney in detached kitchen. Collected to compare with mortar taken from stone base of chimney, S4. |
| S4 | Mortar taken *in situ* from stone base of detached kitchen. Collected to compare composition with mortar taken from extant brick chimney. |
| S5 | Plaster/render, collected loose beneath sub-floor, north room. Blue tinted wash finish over off-white original finish. Impressions on reverse appear to originate from brick work. Twists of hair present in render and fibre (apparently wallpaper) adheres to surface. |
| S6 | Wall paper with abstract floral print collected loose from hearth opening beneath extant floor, South Room, with plaster in blue wash applied over pale pink wash, which in turn is applied over fine white lime plaster. Mortar render behind plaster contains coarse angular sand. in numerous minerals. Collected 2.1.1995. |
| S7 | Plaster/render collected loose in sub-floor area, north room. Impressions indicate this is wall finish. A wash of light pink has been applied over a wash of off-white, which in turn adheres to the plaster surface. |
| S8 | Dark substances, mixed with ?soil and/or mortar to form mastic seal. Collected *in situ* in top most mortar line in loft wall, just below wall plate, north room. This material is believed to be weather or condensation seal in brick work to prevent downward movement of moisture in roof cavity. |
| S9 | Mortar collected *in situ* from firebox, north room. Is it a special mortar? And why is there not more fire damage in this fireplace unless it has been repaired? 11 May 1997 |
| S10 | Cream brick fragment collected loose beneath timber floor, south room. 42.0 mm thick. Very fine clay paste w/o much sand. Lime layer adheres to one edge. This brick is rare in the site, but occurs below floor *in situ* in the outer leaf on the footing, in the footing supporting the hearth stones, and in firebox, central room. Suspected firebrick (refractory). Brick noted by Lewis (1994). |
| S11 | Wall paper in solid orange colour collected loose from beneath floor, north room. Same paper as on extant wall |
| S12 | Off-cut of architrave collected loose in sub-floor, north room. The timber is a softwood, either red pine or Baltic Pine, a black paint adheres to surface, and may be a identical profile of the damaged architrave found attached to the frame in the front doorway of the Central Room, S13. |
| S13 | Remnant softwood architrave with damaged beaded edge collected *in situ* attached to door frame in central room by cabinet makers brad. Damage to bead contour. An off-white paint adheres to surface. Timber appears to be Red pine or Baltic pine. Thickness = 13.5 mm (incomplete), W = 58.0 mm |
| S14 | Cabinet makers nail fragment removed *in situ* from architrave on door frame, central room. Prior to removal, it had cross-section and head shape of cut nail, but was damaged in removal process. Badly corroded and is missing point and head. After cleaning this is a wrought nail that has a shank with opposing taper to its faces and an equal width on the sides, no ridges. It probably is a cut nail that is hand shaped as a finishing nail. |
| S15 | Timber off-cut with 2 " Ewbank nail partly embedded. Pit saw marks present on four sides of hardwood piece, which measures 2 $^{5}$/8" x 2 1/8" (67.0 x 56.0 mm) across section. Collected loose wedged between ceiling joist and brick wall in loft, South Room. Significance; is believed to be remnant (as an off-cut) of slate roof member. |
| S16 | Roman cement, collected *in situ* attached to *in situ* cream brick supporting sandstone hearth stone in sub-floor area of South Room. This sample is an exact contemporary with house construction. |
| S17 | Timber half round bead stop with two nails attached. Painted off-white with yellow tint; exact color as that on interior timber lining of the detached kitchen. Nails are labelled N1.10 a & b. Collected *in situ* from head of door frame, central room. No glazing material is present. Significance; glazing bead from transom light above door. |
| S18 | Timber shingle fragment with two fixing holes from rectangular roofing nail. Evidence of weathering and nail holes indicates shingle was used. Both ends neatly trimmed. Length = 370. 0 mm, thickness = 9.4 mm. Split. Collected loose on wall ledge, north room. Significance; is original roofing material for homestead |
| S19 | Timber shingle fragment with no nail holes; both ends neatly trimmed. Length = 370.0 mm, thickness = 7.5 mm. Split. Collected loose wedged between ceiling joist and brick wall, north room. Significance; is original roofing material for house, unused because it is not weathered. |

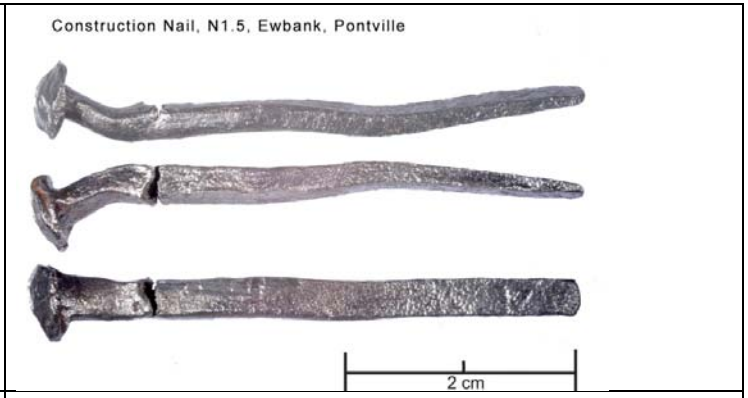
## Appendix 5 Inventory of Pontville Reference Sample Collection

| No | Description & Context |
|---|---|
| S20 | Timber shingle fragment with no nail holes no weathering, both ends and one side are neatly trimmed. Length = 370.0 mm, thickness = 4.6 mm. Collected loose with S19 wedged between ceiling joist and brick wall, north room. Significance; is original roofing material for house. |
| S21 | Soft wood timber fragment, probably fir; pit sawn and lightly milled, with zinc alloy roofing nail Type 1, fixed *in situ.* 2" x ¾" (54.5 mm x 21.4 mm). Collected loose from wall ledge, north room. Significance; is believed to be batten for either shingle or slate bearing roof. |
| S22 | Wall paper with pink dots and silver band laid over earlier paper of brown paper with white floral motif, including white pedals. sub-floor, South Room, Pontville. |
| S23 | Undecorated wall paper over pink cement wash over plaster. This is the best example of a blank paper from Pontville, possibly a liner. Sub-floor, north room, Pontville. |
| S24 | Wall paper: this is still on the wall in two rooms and is believed to have been applied after the walls were re-plastered in c. 1951. Central and north room walls, Pontville. |
| S25 | Wall paper with brown flower in silver outline. Only the general context for this sample is known, the piece being collected loose from under the floor, Central room, Pontville. Note that a separate paper adheres to the back and this in turn was applied over a blue cement wash. This is the only example. |
| S26 | Plaster undecorated, with ultra fine plaster finish. From ceiling plaster with definite lath marks. Context in Pontville uncertain, probably sub-floor central room. Hair present, coarse angular sand common. Undecorated wall paper removed and assessed by Murphy. |
| S27 | Cream brick measuring 40.0 x 100.50 mm (length incomplete) taken *in situ* from base of hearth stone, south room. Roman cement is attached, as is lime layer, possibly indicating succession of two different applications. Sample missing -see project image file and S10. |
| S28 | Terra cotta clay ornamental piece collected in soil of south garden. Function unknown; resembles facade element for tile roof, garden, or architectural decoration. |
| S29 | *In situ* render from central room, top south wall, contemporaneous w/ construction. Fine grain sand, hair present. |
| S30 | Render loose from subfloor, north room. Thin layer of white plaster w/ hair |
| S31 | Wrought iron square shank nails (4), handmade. Iron sheet cut nail (1), incomplete. Wrought iron Ewbank style nail (1), incomplete and small. One iron screw. Surface, Trench 5, central room. |
| S32 | Renumbered |
| S33 | Ceiling plaster and render, loose from subfloor, north room |
| S34 | Bone button< kitchen subfloor, |
| S35 | Clay floor (batching floor), beneath existing timber floor, Trench 5,central room. Contemporaneous with homestead construction. Bricks fragments, including brick pieces, plant fibre, charcoal, very fine grained sand, with % of coarse sand low. |
| S36 | Softwood batten frag. w/ early Ewbank nail and Type 1 zinc alloy roofing clout, both *in situ*. 20x35x440 mm. |
| S37 | Nails, lathing, loose from surface, Trench 5, central room; from brushing. Heavy corrosion. |
| S38 | Softwood batten fragment., loose from sub-floor cavity w early Ewbank nails *in situ*. 25x35x490 mm. Note marks indicating ripping by broad hand saw, possibly in a mechanical saw pit. |

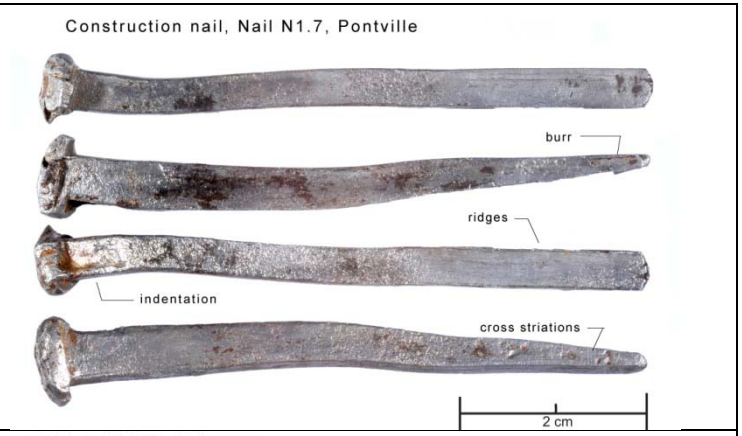
**Appendix 6:** Pontville Nail Reference Collection

| No. | Description--Iron wrought & Machine made nails | Measurements | Image |
|---|---|---|---|
| **N1.1** | Wrought iron Ewbank construction nail (1), incomplete length, crude offset rose-head, uneven square shank with flare at head, burr one side, probably tapered. Taken *in situ* from top edge of pit sawn ceiling joist, central room. Significance: associated with floorboards of loft. E | Head dia. = 6.5 mm<br>Shank 3.0 x 4.0 mm<br>L. = 22.2 mm incomplete. |  |
| **N1.2** | Retired | | |
| **N1.3** | 1" iron lath nail (1), flat roughly rectangular head; square shank at head which tapers to sharp three sided point, burrs on one face. Diagonal cut across shank profile creates triangular point. Point missing due to damage. Taken *in situ* from horizontal timber strip nailed to pit sawn ceiling joist, central room, both of which bear stains of lath and plaster ceiling finish. Significance: is exact contemporary with lath & plaster ceiling installation. A | Head length = 7.5 mm<br>Head width = 5.4 mm<br>Shank = 3.1 x 3.0 mm<br>L = 23.4 mm incomplete |  |
| **N1.4** | 2½" wrought iron construction nail (1), crude rectangular head; shank is rectangular at head and tapered on two sides to broken point, burring on three corners. Rectangular indentation hard against head on two faces. Taken *in situ* from short piece of horizontal timber to which lath was attached and itself was nailed to pit sawn ceiling joist in central room. Significance: is exact contemporary of ceiling construction. A | Head length = 9.4 mm<br>Head width = 7.8 mm<br>Shank = 5.9 x 4.5 mm<br>Length = 64.5 mm |  |

**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N1.5** | 1¾" wrought iron Ewbank construction nail (1), crude offset rose head, rectangular shank, burr one face. Taken from *in situ* from top edge of pit sawn ceiling joist, central room. Significance: is contemporary of installation of floor board in loft. E | Head dia. = 7.0 mm<br>Shank sect. = 3.0 x 4.0 mm<br>Length = 47.4 mm |  |
| **N1.6a** | Wrought iron Ewbank construction nails (1), rectangular shanks, heads missing. Shank tapers on opposing faces on last 1/3 of shank, taper to opposing side faces from near head forms sharp point. Taken *in situ* from top edge of ceiling joist, central room. Significance: associated with fixing of loft floorboards. E | Shank sect. = 3.8 x 2.5 mm<br>Length = 36.2 mm incomplete |  |
| **N1.6b** | Wrought iron Ewbank construction nails (1), rectangular shanks, heads missing. Shank tapers on opposing faces on last 1/3 of shank, taper to opposing side faces from near head forms sharp point. Taken *in situ* from top edge of ceiling joist, central room. Significance: associated with fixing of loft floorboards. Head and neck missing. E | Shank sect. = 3.7 x 2.7 mm<br>Length = 33.9 mm incomplete |  |

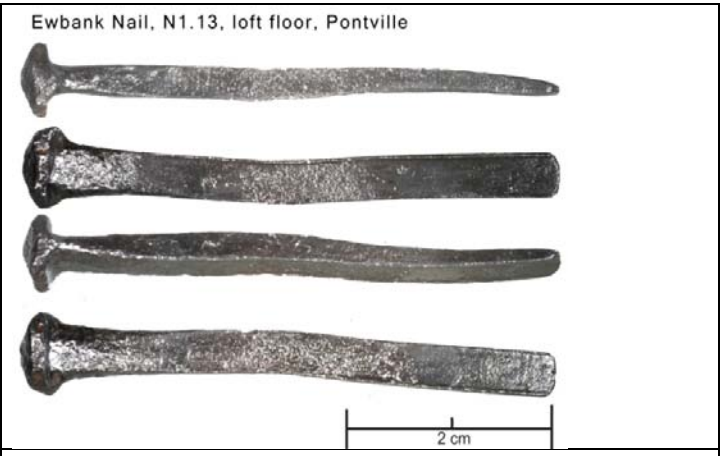
**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N1.7** | 2½" wrought iron construction nail; rectangular shank at head w/o flare; crude robust rose-head; single rectangular deep compression (vice) mark at neck, with pair of sharp ridges on one face and single burr on adjacent side near point - suggesting both shear cuts and machine pressing. Collected *in situ* from horizontal strip which this nail attaches to the ceiling joist, central room. Significance: is exact contemporary of installation of lath and plaster ceiling. Believed to be early cut nail that was pressed to gain a taper. | Head = 9.4 mm x 7.3 mm<br>Shank = 5.5 x 4.3 mm<br>Length = 67.5 mm |  |
| **N1.8** | 1" wrought iron lath nail (1), flat roughly rectangular head; square shank at head which tapers to sharp three sided point. Width of shank equals narrowest width of head. Collected *in situ* from bottom edge of pit sawn ceiling joist with plaster stains, central room. Significance: is exact contemporary with ceiling installation. Identical to N1.11. Type 2 class. E | Head dia. = 7.4 x 5.6 mm<br>Shank = 3.0 x 3.0 mm<br>Length = 18.9 mm incomplete |  |
| **N1.9** | Retired number and assigned to zinc alloy class | | |

**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N1.10 a & b** | 1¼" wrought iron fixing nails w/ heads flatted to reduce show (2): crude rectangular flat head, with narrowest width equal to shank width; probably hand forged. Indentation at neck in specimen b, other specimen eroded. Tapered rectangular shank finishes in spade point. Collected *in situ* from half round stop bead, top of door head frame, central room. Head modified by extraction. Significance: is exact contemporary with transom light installation. Most probably handmade. E | a.<br>Head dia. = 7.9 x 4.3 mm.<br>Flattened "T" shape head<br>Shank = 2.6 x 2.5 mm<br>Length = 28.5 mm<br><br>b.<br>Head dia. = 7.8 x 4.5 mm<br>Shank = 2.8 x 2.8 mm<br>Length = 33.1 mm |  |
| **N1.11** | 1" wrought iron lath nails (2) fragments; flat roughly rectangular offset head; square shank at head w/ slight flare, which tapers to mid-shank. Width of shank equals narrowest at head. Taken *in situ* from top edge of in-filled pit sawn ceiling joist which is attached to header beam in loft entry, South Room. There are no stains of lath and plaster on this joist, either top or bottom edge. Significance: beam borrowed from original position of construction and used as infill beam. This nail is identical to N1.3. E | Head dia. = 8.0 x 5.5 mm<br>Shank = 3.0 x 3.0 mm<br>Length =13.0 mm incomplete |  |
| **N1.12** | 2½" iron nail, Ewbank, (1); rose-head w/ four facets, frag; Ewbank. Rectangular head and shank, shank flares to width of head, no taper in existing shank, no compression in neck. Collected *in situ* from pit sawn timber cross brace in extant roof which is re-cycled from original roof in house. Significance: exact contemporary of house construction and its presence indicates use of nails to fix main timbers in slate bearing roof. See further notes in this report. E | Head dia. = 8.2 mm<br>Shank = 4.5 x 4.5 mm<br>Length =31.5 mm incomplete |  |

**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N1.13** | 2" Ewbank iron brad (1); rectangular shank. Well formed rectangular head, flaring shank on two sides, tapering two sides with distinct paired ridging from mid-shank to sharp pointed end. Taken *in situ* from top edge of ceiling joist, central room. Significance: contemporary with installation of timber loft floor.E | Head dia. = 6.5 x 6.0 mm<br>Shank = 4.0 x 2.6 mm<br>Length = 49.0 mm |  |
| **N1.14** | 3" Ewbank iron construction nail. Well formed rectangular head, slight compression marks around neck at head, flaring shank on two sides, tapering on two sides, with slight localized ridging on faces. Taken *in situ* from end of re-used rafter in homestead. Photograph 10e. A | Head dia. = 9.0 x 8.2 mm<br>Shank = 4.6 x 5.0 mm<br>Length =78.1 mm |  |

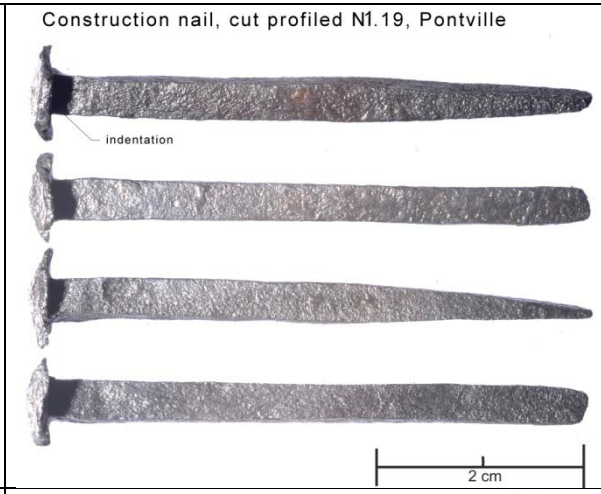
**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N1.15** | 2" Ewbank wrought brad (1); rectangular shank. Well formed rectangular head, indistinct mark on head may be brand but it is not a star, compression marks around shank at head, flaring shank on two sides, tapering two sides from mid-shank. Taken *in situ* from top edge of ceiling joist, north room. Significance: contemporary with installation of timber loft floor. E | Head dia. = 7.7 x 7.5 mm<br>Shank = 3.9 x 3.3 mm<br>Length = 51.5 mm |  |
| **N1.16** | 2" square shank wrought construction nail (1) with clasp head. Shank tapers on four sides to sharp point, terminates at head w/o flaring, indentation or compression. Taken *in situ* from floor board in loft. Significance. Exact contemporary of loft construction. Extraction damage. A | Head dia. = 8.2 x 9.5 mm<br>Shank dia. = 4.5 x 4.5 mm<br>Length =51.0 mm |  |

**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N1.17** | 2" square shank wrought iron construction nail, single taper last 1/3 length of shaft, opposing rectangular indentations hard against head in neck, slight burrs on side face. Irregular surfaces and dimension of the shank suggest this is hand worked shaft. Head irregularly round, offset, cuspate, flat, w/thin profile and no hammer damage. (1) found loose in loft, shank joins head w/o flare and tapers on opposing faces to broken point from mid-shank, no burring. E | Head dia. = 8.9 x 9.0 mm<br>Shank = 3.9 x 4.3 mm<br>Length=55.7 |  |
| **N1.18** | 2½" Ewbank iron nail (1); crude rose-head; Ewbank w/ flare at head. Very slight burring opposing shank surfaces. Roughly rectangular head and square shank,. Damaged tip. Found loose on ceiling in loft, north room. A | Head dia. = 8.4 x 8.7 mm<br>Shank = 4.5 x 4.8 mm<br>Length = 62.7 |  |

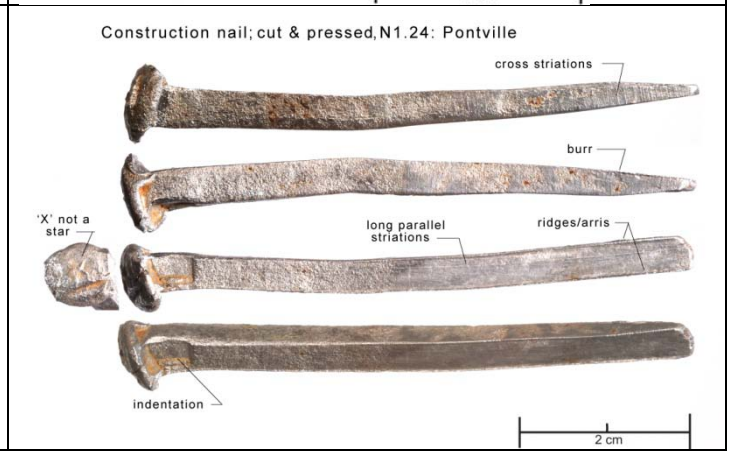
**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N1.19** | 2" iron nail (1), square shank, w/o flare at head, no burring. Thin cuspate rose head. Shank taper opposing faces. Rectangular indentation 3.5 mm long on one face at head extends across shank width, slight indentation opposing surface, the deeper mark rotated away from shank axis. Rotation of 1-2° of shank around its axis is noted. Found *in situ* in re-used rafter in batten position. A | Head dia. = 8.4 X 8.7 mm<br>Shank = 3.8 x 4.1 mm<br>Length=53.5 |  |
| **N1.20** | 2" wrought iron square neck cut nail (1), square shank, w/o flare at head, burring on sides. Indentation 4.5 mm long on one face at neck extends across shank width, slight indentation opposite face. Slight Axial rotation. Thin cuspate head, roughly round, offset. Tapered from head to point on four faces. Point spade shaped. Found loose in ceiling surface in loft, north room. Irregularity in surface treatment and thickness variation observed, slight tip and extraction damage. A | Head dia. = 9.4-10.6 mm<br>Shank = 4.1- 4.3 mm<br>Length=52.6 |  |

**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N1.21** | 2" iron square neck cut nail (1), Low roughly round thin head w/o flare at neck, burrs on sides of opposing taper. Indentation 4.5 mm long on one face at neck, slight on other. Thin flat head, roughly round. Tapered from mid-shank to point on opposing faces, lesser taper on other opposing faces. Point spade shaped. Irregularity in surface treatment and thickness variation suggest nail is hand-made. Found *in situ* on pit sawn rafter in extant roof in position of batten. A | Head dia. = 9.5 m damaged<br>Shank = 4.1 x 4.3 mm<br>Length=55.1 mm |  |
| **N1.22** | 2" wrought iron square neck cut nail (1), square shank, w/o flare at head, no burring. Indentation 3.5 mm long on one face at head. Thin flat head, roughly round. Tapered from mid-shank to point all four faces. Pointed tip.. Found loose on ceiling above north room in loft. E | Head dia. = 9.5 x 9.8 mm<br>Shank = 3.9 x 4.0 mm<br>Length= 49.6 mm |  |

**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N1.23** | 2" wrought iron square neck cut nail (1). w/o flare at head, slight burring on one side. Slight indentation 3.5 mm long on one face at neck. Thin flat head, roughly round. Tapered from mid-shank on all faces. Tip is sharply pointed. Irregularity in surface treatment and thickness variation suggest nail is handmade. Found loose in wall cavity in loft. E | Head dia. = 8.6 x 8.8 mm<br>Shank = 4.0 x 4.0 mm<br>Length= 52.6 mm |  |
| **N1.24** | 3" wrought iron square neck cut nail (1). Square shank joining head w/o flare; deep single offset depression one face at neck from vice. Tapered from mid-shank, w/ pair of deep ridges one face, none on opposite. A burr is present on adjacent side suggesting this is a cut nail. Spade point. A mark of a raised cross or "X" is centred on the head; although heavily weathered, this mark does not appear to be a star. Taken *in situ* from pit sawn ceiling joist trimming piece, south room. A | Head dia. = 8.2 x 9.7 mm<br>Shank = 4.4 x 4.7 mm<br>Length= 68.5 mm |  |

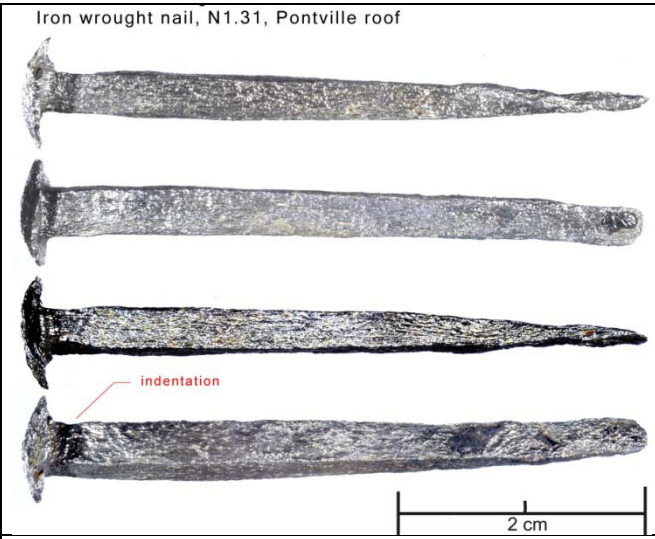
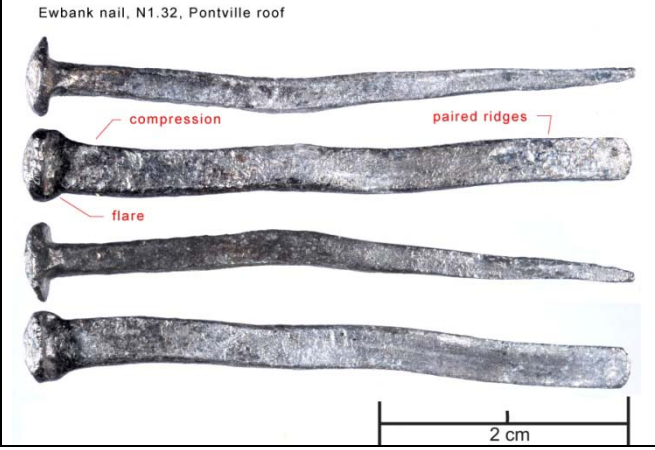
**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N1.25** | Iron cabinet maker's brad (1). rectangular shank, tapering from mid-point to spade tip. Rounded corners of shank at vestigial head. Slight burring on one face near tip and shank bulges in first third distance from head. Taken *in situ* from surround trim on window, north room. It is machine processed but note cross striations on taper surface. Suspected of being a modified Ewbank with partial head removal by carpenter. A | Head dia. = 4.4 x 3.6 mm<br>Shank = 2.3 x 2.7 mm<br>Length= 35.5 mm |  |
| **N1.26** | Wrought iron nail, (1) incomplete, with square shank and roughly triangular thin, head w/ indistinct facets. Distinct major and opposing minor indentation at neck. Found *in situ* in position on batten on reused pit sawn rafter in homestead loft. E | Head dia. = 10.0 x 10.6 mm<br>Shank = 3.5 x 4.0 mm<br>Length= 27.0 mm incomplete |  |
| **N1.27** | 3 " Ewbank iron nail, (1) in two pieces, with square shank and roughly square thin, head, flared on opposing sides. Slight burring one side near tip, tapering from mid-shank to spade point. Found *in situ* in position on batten on reused pit sawn rafter. | Head dia. = 8.4 x 8.8 mm<br>Shank = 4.5 x 4.5 mm<br>Length= 77.0 mm estimated |  |

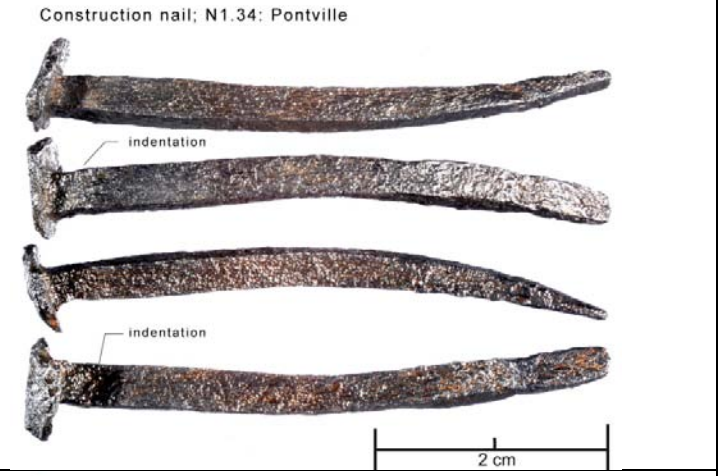
**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N1.28** | Wrought iron cut lath tack (1). Roughly triangular shank, flared neck at head, finished with sharp point and sharp cornered triangular cross section w/ burrs on two faces from shearing blade; Collected loose from sub-floor cavity, central room, probably unused. A | Head dia. = 5.7 x 6.8 mm<br>Shank = 3.0 x 4.3 mm<br>Length= 26.8 mm |  |
| **N1.29** | Wrought iron lathing tack (1), incomplete. Roughly rectangular head, flaring of shank at head, triangular cross-section. Collect *in situ* from bottom edge of ceiling joist with plaster stains, central room. A | Head dia. = 7.0 x 5.8 mm<br>Shank = 3.5 x 3.5 mm<br>Length = 15.0 mm incomplete |  |
| **N1.30** | retired | | |

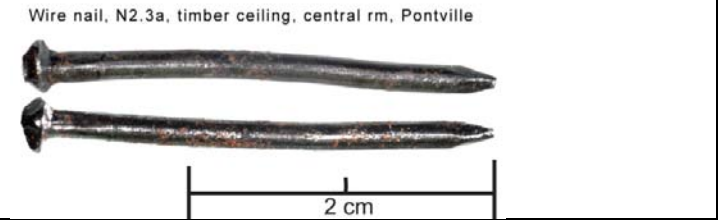
**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N1.31** | Iron square neck cut nail (1), 2". Square shank and neck meets head abruptly w/o flare; one major and opposing minor indention at neck, slight cuspate shank sides with burrs. Shank tapers broadly along two faces from mid-shaft, more sharply two other faces 3/4 shaft. Tip distortion noted but probably was square pointed. Probably cut from profiled stock. Roughly round head, thin and slightly cuspate. A | Head dia. = 8.5 x 9.2 mm<br>Shank dia. = 3.6 x 3.8 mm<br>Length = 51.5 mm |  |
| **N1.32** | Ewbank iron nail (1). Rectangular shank, flared at head; tapered opposing faces, compression marks at neck w/ rounded shank edges but shank edges are sharp same distance as taper. Ridges on shank only near tip, one face. Spade shaped tip w/shear trim marks. A | Head dia. = 5.8 x 6.5 mm<br>Shank dia. = 2.5 x 3.9 mm<br>Length = 48.9 mm |  |

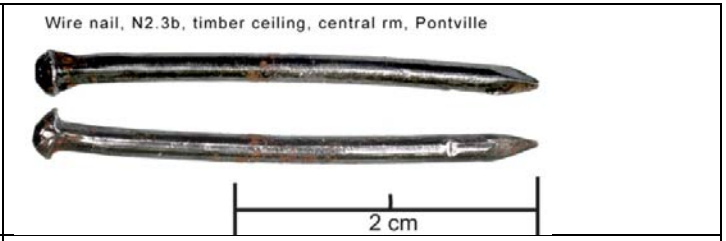
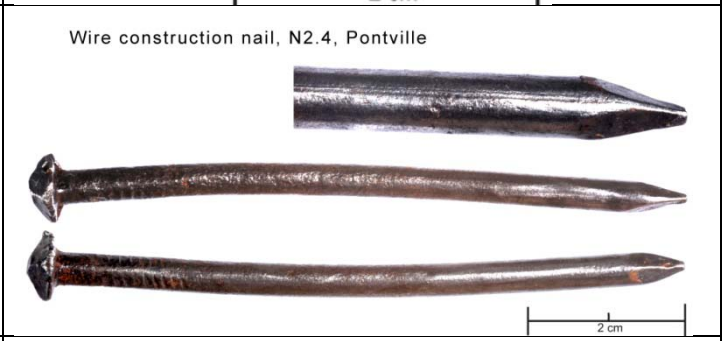
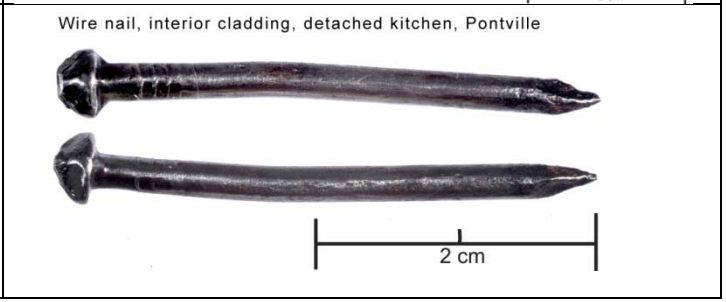
**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N1.33** | Iron clout (1). Nearly round thin flat off-set head w/ neck terminating w/ wide flare at head w/o indentation or compression. Shank w/ low opposing taper from mid-point and other faces w/ high taper at tip. A | Head dia. = 7.0 x 8.0 mm<br>Shank dia. = 2.6 x 2.3 mm<br>Length = 37.1 |  |
| **1.34** | Iron square neck wrought iron cut nail (1), 2". Thin irregular offset flat head, square shank and neck meets head w/o flare and tapered . Opposing indentations hard against head. Single burr on diagonal corners indicates this is a cut nail, possibly from a profiled sheet. Irregular shape near tip may be from hammering during installation but a rotational twist around axis is noted. Retrieved loose in loft recesses. A | Head dia. = 8.5 x 9.5mm<br>Shank dia. = 3.7 x 3.9 mm<br>Length = 52.0 |  |
| **N1.35** | Iron square neck cut nail (1), incomplete length; offset irregularly round head w/ four facets, cuspate. Indentation s from grip hard against head at neck. Slightly cuspate shank edges, no burrs or ridges. Point missing. A | Head dia. = 8.7 x 10.4 mm<br>Shank dia. = 3.6 x 4.0 mm<br>Length = 39.3 incomplete |  |

**Appendix 6:** Pontville Nail Reference Collection, continued

| No. | Description-Wire nails | Measurements | Image |
|---|---|---|---|
| N2.1 | 2" Wire roofing nail (1), with round domed lead washer on head. Base of lead head is flat (un-cupped). Roughened crimp marks near head, square neck at head, four facet point and grove runs full length of shank, shank flared at neck. High rose head. Taken from sediments in sub-floor area of kitchen. Steep 4 sided facetted head. Painted green. Significance: held first corrugated iron sheets to roof (Gospel Oaks brand). Shown here is image of assembled lead head and nail, and second of same nail w/o head. Square neck suggests it is an iron nail. A. | Head dia. = 20.0 mm<br>Shank dia. = 3.8 mm<br>Length = 54.5 mm |  |
| 2.1b | 2" Wire roofing nail (1), with round domed lead washer on head. Base of lead head is flat (un-cupped) w/ lead protrusion around neck. Roughened crimp marks near head, square shank at head, four facet point and a grove runs full length of shank, shank flared at head. Taken *in situ* from extant rafter of kitchen. Painted green. Significance: held first corrugated iron sheets to roof (Gospel Oaks brand). Shown here is image of assembled lead head and nail, and head from top view. A | Head dia. = 19.8 mm<br>Shank dia. = 3.8 mm<br>Length = 54.5 mm |  |
| N2.2 | 3" wire nail, distinct, four faceted rose-head. Identical to N2.4 described below, bent. Taken *in situ* from hardwood nogging, frame of kitchen. Significance: exact contemporary to kitchen construction. | Head dia. = 7.2 mm<br>Shank dia. = 4.0 mm<br>Length = 78.5 mm | |
| N2.3a | 1¼" wire brads (3) with distinct well formed offset rose-head, two opposing major haunches , 4 sided point. Taken *in situ* from extant Baltic pine ceiling lining in central room of house. Exact contemporary of timber ceiling installation. | Head dia. = 3.8 mm<br>Shank dia. = 1.9 mm<br>Length = 33.2 mm |  |

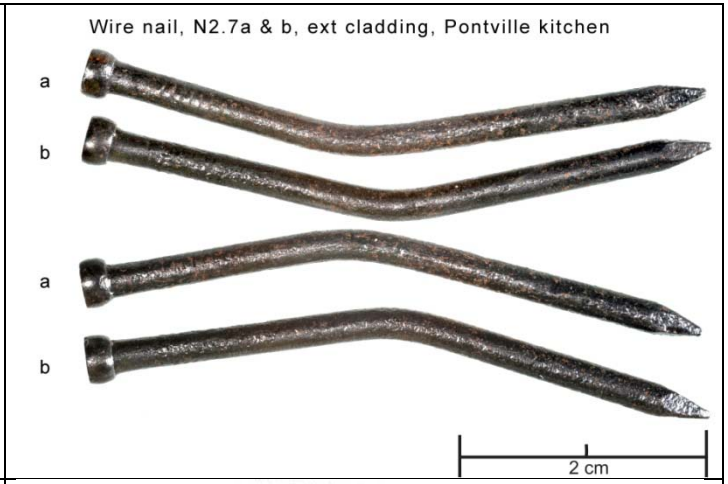
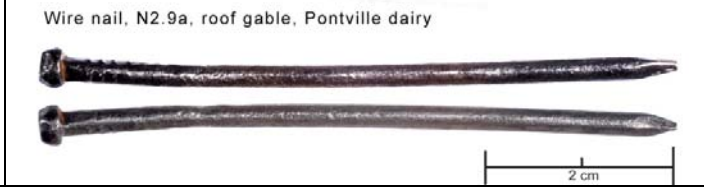
**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N2.3b** | 1¼" wire brads (1) with distinct well formed offset rose-head, two opposing major haunches , 4 sided point. Taken *in situ* from extant Baltic pine ceiling lining in central room of house. Exact contemporary of timber ceiling installation. | |  |
| **N2.4** | 3" Wire steel nail (1); distinct high rose-head with four facets and is roughly rectangular and centred; round shank at head; two minor spurs; eight ribs below head; four sided point. Collected *in situ* from Oregon Pine batten on detached kitchen roof. Significance: typical of many others and is exact contemporary with kitchen construction. E | Head = 8.0 mm<br>Shank dia. = 4.0 mm<br>Length = 80.0 mm |  |
| **N2.5a** | 1½" Wire nail (1), distinct round rose-head with four steep facets; two major spurs only; four sided point. Collected *in situ* from timber cladding, interior wall of detached kitchen. Significance: is exact contemporary with first timber lining of kitchen. E | Head dia. = 5.0 mm<br>Shank dia. = 2.5 mm<br>Length = 38.5 mm |  |

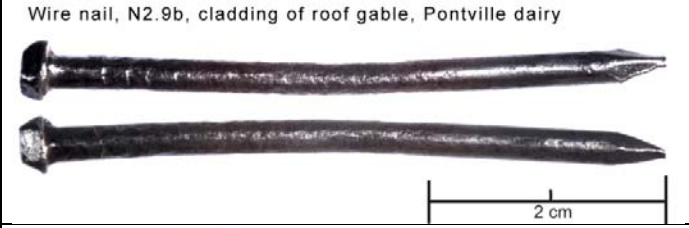
**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N2.5b** | 1½" Wire nail (1), distinct rhomboid head with four steep facets; two major spurs only; four sided point. Collected *in situ* from timber cladding, interior wall of detached kitchen. Significance: is exact contemporary with first timber lining of kitchen. E | Head dia. = 5.0 mm<br>Shank dia. = 2.5 mm<br>Length = 38.0 mm |  |
| **N2.5c** | 1½" Wire nail (1), distinct round rose-head with four steep facets; two major spurs only; four sided point. Collected *in situ* from timber cladding, interior wall of detached kitchen. Significance: is exact contemporary with first timber lining of kitchen. E | Head dia. = 5.0 mm<br>Shank dia. = 2.6 mm<br>Length = 39.7 mm |  |
| **N2.6** | 2" Wire nails (4), distinct round medium rose-head with four facets; four major spurs, four sided point. Collected *in situ* from exterior Baltic Pine cladding of detached kitchen. Note N2.7 is also from this cladding. Significance; is exact contemporary with timber cladding of kitchen. | Head dia. - 5.8 mm<br>Shank dia. = 3.0 mm<br>Length = 55.5 mm |  |

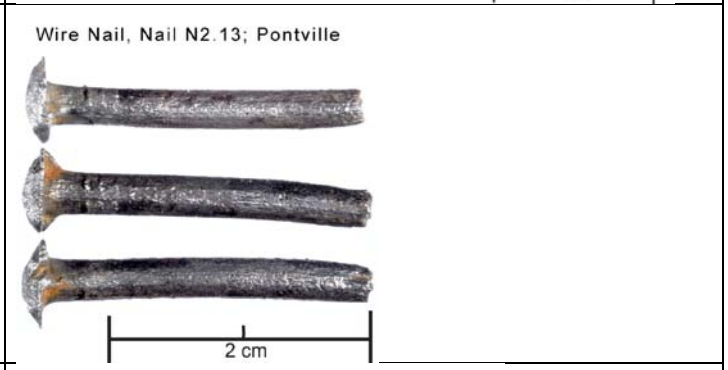
**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N2.7** | 2" Wire bullet-head nails (3); round, un-faceted flat head; four sided point. Collected *in situ* from exterior Baltic Pine cladding of detached kitchen. Significance: is interpreted to be contemporary with repairs to fix loose cladding. | Head dia. = 4.0 mm<br>Shank dia. = 2.5 mm<br>Length = 50.0 mm |  |
| **N2.8** | 2" Wire bullet-head nails (2); round, un-faceted head; four sided point, parallel shallow lines full length of round shank. Collected *in situ* from extant timber floor boards, north room of house. Significance; is contemporary with installation of most recent floor boards in house. E | Head dia. = 4.5 mm<br>Shank dia. = 2.7 mm<br>Length = 55.0 mm |  |
| **N2.9a** | 2½" Wire nail (1), rhomboid head with four facets; ribs indistinct; four sided points, . Collected *in situ* from external timber cladding of collapsed gable roof, outbuilding presumed to be the dairy. E | Head dia. = 4.3 mm<br>Shank dia. = 2.3 mm<br>Length = 65.5 mm. |  |

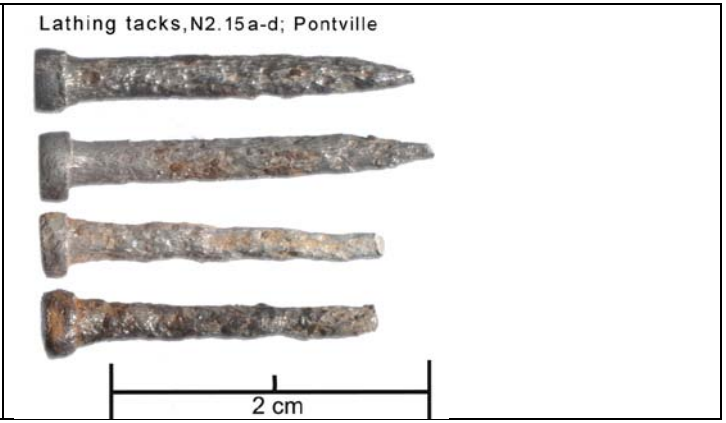
**Appendix 6:** Pontville Nail Reference Collection, continued

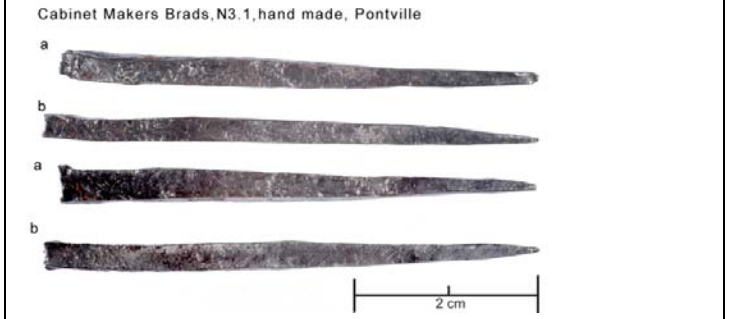
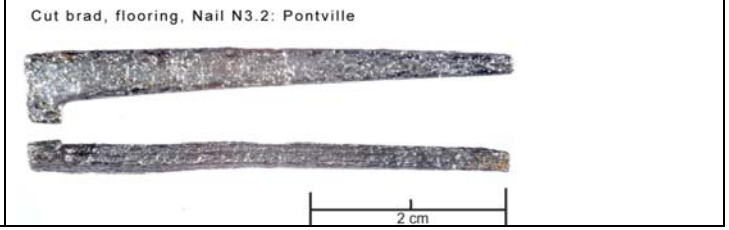
| | | | |
|---|---|---|---|
| **N2.9b** | 2" wire nail (1), rhomboid heads with four facets and platform at base; ribs indistinct; four sided points. Collected *in situ* from external timber cladding of collapsed gable roof, outbuilding presumed to be the dairy. E | Head dia. =5.0 mm<br>Shank dia. = 2.6 mm<br>Length = 53.8 mm |  |
| **N2.10** | 3" early bullet head wire nail (1); four faceted head, two major haunches, four sided point. Collected *in situ* from extant rafter at wall plate in north room. Significance; is exact contemporary to construction of extant roof. See neck and head enlargement | Head dia. = 6.0 mm<br>Shank dia. = 3.5 mm<br>Length = ~ 76.0 mm (bent) |  |
| **N2.11** | 2" rose-head wire nail (1), rafter-to-wall plate, north rm; two major spurs only; four sided point. Collected *in situ* from rafter at wall plate. Significance; is exact contemporary of installation of extant roof. | Head dia. = 4.7 mm<br>Shank dia. = 2.4 mm<br>Length = ca. 55.0 mm |  |

**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N2.12** | 3" Iron wire rose head nail (1). *In situ* in noggings of detached kitchen. Irregular rectangular robust head w/ four facets. Shank w/ four sets of indistinct grip marks, square shank at head, shaft otherwise round, one set of opposing spurs, point with four facets. Metal failure (greenstick break) on shaft and tip is split along the grain. Iron construction. A | Head = 8.6 mm<br>Shank =4.4 mm<br>Length: 75.0 mm |  |
| **N2.13** | Incomplete iron wire nail (1). Thin, cuspate rose head joins square neck with faint grip marks on an otherwise round shaft. Well formed haunch beneath head. Grip marks are *raised* above shank surface. Missing shank to mid-shaft. Found loose in sub-floor cavity. A | Head = 6.5<br>Shank =2.8<br>Length: 24.2 mm |  |
| **N2.14** | 1" wrought iron wire lath nail (1), probably hand forged, badly corroded. Head offset and roughly round, shank tapered full length to point. Taken *in situ* from underside of pit sawn ceiling joist in central room of house from area clearly stained by plaster application. Significance: is exact contemporary of ceiling installation, probably the timber panelling. E | Head dia. = 5.4 mm<br>Max shank dia. 3.0 mm<br>Length = 25.6 mm |  |

**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N2.15** | Lathing nails (4). Flat round head w/ slight concavity on top; round shank throughout its length, tapering to sharp point. Shank diameter is slightly enlarged at head. Two sizes recognized, a slighter version tapers from close to the head, the other tapers in 1/4 distance of point. Collected loose from beneath central room floor and one was found *in situ* in ceiling joist. A | |  |

| No. | Description | Measurements | Image |
|---|---|---|---|
| **N3.1** | 2” wrought iron cabinet makers cut nails (2) with taper on four sides of shank to create sharp point and spur head. Lug head on one nail. Definite hand-forged taper, modified cut nail. Rectangular shank at head. Taken *in situ* from timber spacer strip, front edge of window surround, west wall, central room. Significance: directly associated with assembly of window surround in central and north rooms. E | Shank = 3.1 x 2.6 mm<br>Length = 49.0 mm |  |
| **N3.2** | 2” cut nails (4) with single lug head each: rectangular shank section throughout length. Collected *in situ* from floor joists in detached kitchen which supported floor boards. Significance: exact contemporary with floor installation and construction of detached kitchen. | Head width = 7.7 mm<br>thickness = 2.8 mm<br>Length = 51.0 mm |  |

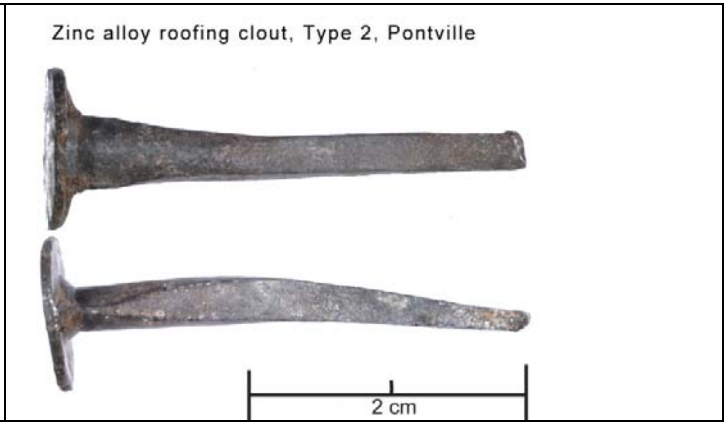
**Appendix 6:** Pontville Nail Reference Collection, continued

| No. | Description--zinc alloy roofing clouts | Measurements | Image |
|---|---|---|---|
| N4.1 | Loose from top of loft wall, north room; roofing clout, zinc alloy, slate may adhere to shank at junction with head. Do not chemically treat | Head = 12.7<br>Shank =3.3 x 4.7 m<br>Length = 37.5 mm |  |
| N4.2 | Roofing Clout, found loose either in loft or subfloor area; unused and shaft is in excellent condition | Head = 12.3 x 10.7 mm<br>Shank =3.0 x 4.5 m<br>Length = 37.7 mm |  |
| N4.3 | Solid Zinc alloy slate roofing clout, asymmetric taper from mid-shank to pointed tip; two major spurs only. Taken loose from top surface in loft, probably unused. It represents a variant of N1.9a. | Head dia. = 10.0 mm<br>Max. shank = 4.2 x 2.8 mm<br>Length = 37.4 mm | |
| N4.4 | Solid Zinc alloy slate roofing clout (1), asymmetric taper from mid-shank to pointed tip. Taken loose from sub-floor area, central room. A band of slate residue adheres to shank at head, indicating that despite its context below the floor, this type of nail was used to fix tiles to the roof at Pontville. Do not chemically treat | Max. shank = 4.8 x 3.4 mm<br>Head dia. =12.3 mm<br>Length = 34.5 mm | |

**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N4.5** | | | Roofing Clout, Zinc alloy, Nail 4.5; Pontville   |
| **N4.6** | Solid cut Zinc alloy slate roofing clout (1), asymmetric taper from mid-shank to pointed tip. Extrusion spurs on underside of head are distorted by slate. This nail is a Type 2 zinc nail and was taken loose from loft cavity area, central room. Significance: this type of nail was used to fix either shingles or slates to the roof at Pontville. | Max. shank = 4.0 x 3.0 mm<br>Head dia. =11.4 mm<br>Length = 33.0 mm | Zinc alloy clout, N4.6: Pontville   |

**Appendix 6:** Pontville Nail Reference Collection, continued

| | | | |
|---|---|---|---|
| **N4.9** | Solid Zinc alloy slate roofing clout (1), asymmetric taper from mid-shank to pointed tip, round flat head with two opposing major spurs. One-piece construction. Taken loose from sub-floor area, central room. Excellent condition, probably unused. Shank taper created by shearers cutting one side from mid-point to point, head then shaped by press which results in compressed rounded edges of neck and distinctive opposing major spurs on head. | Max. shank = 4.8 x 3.4 mm<br>Head dia. =12.3 mm<br>Length = 34.5 mm |  |

Legend:

(2) = number of nails in sample

N 4.X.Y = Pontville Nail plus specimen number

E = Electrolysis cleaning

A= Acid cleaning by phosphorous 25%

Format

## Appendix 7: Pontville Excavated Artefact Collection

TRENCH 1 1X4m at fireplace inside detached kitchen
Surface: May 6 1997

| CLASS/TYPE | NO. | DESCRIPTION |
|---|---|---|
| Nails | 5 | 2" wire drawn bullet heads |
| | 3 | 2" wire drawn rose head. |
| | 5 | too eroded to describe |
| | 1 | tin/lead slate roofing nail with flat head. |
| | 2 | 2" wire drawn roofing nail with lead head, green paint. |
| | 6 | 2" cut nails, Type 1 cut flooring brads |
| Slate roofing tile | 11 | grey slate fragments. Weight -290 gms |
| Slate sheets | 2 | Parallel incisions, probably school students slate |
| Bone | 3 | rabbit mandibles plus legs |
| | 4 | sheep ribs |
| | 2 | cow ribs, distal end |
| | 1 | Crown crimp seal, probably for beer bottle, 20th century manufacture. |
| Misc. Metal | 1 | Cast iron bar with shaped profile, probably stove part. |
| | 1 | Copper sleeve for artist brush handle |
| | 27 | Cement fibre board |
| Sheeting | 8 | composition board with wire mesh backing |
| | 4 | Tin sheet, flat: used as *ad hoc* barrier at base of kitchen wall: largest measures 15 x 75 mm |
| Bottle Glass | 1 | body fragment, ketchup bottle |
| Clear | 1 | body fragments, probably cosmetic bottle. |
| White | 1 | body fragment, probably medicine; 20th century manufacture |
| Dark blue | | numerous small fragments: 3.0 mm, 2.2 mm, 1.3 mm thicknesses. Glazing line on straight edged piece. |
| Sheet Glass | | Numerous small pieces |

TRENCH 1, SQUARE 1
Unit 2 all discarded

| | | |
|---|---|---|
| Bone | | numerous fragments: sheep ribs, vertebrae, metacarpals, pelvis, mandible; mandible of large dog: rabbit vertebrae. |
| Bottle Glass | 1 | Clear glass Irish Whisky |
| | 1 | Amber beer bottle |
| | 1 | Clear straight sided jar w/ rounded lip edge, possibly vacuum packed jam/condiment jar, mid-20th century manufacture. |
| | 1 | Clear drinking glass with fluted sides. |
| | 1 | Dark blue medicine bottle. |
| | 1 | numerous small fragments from heavy jar/bowl; 4.9 mm thick. |
| Clear Sheet Glass | | Numerous small fragments; 3.0 mm, 1.3 mm (straight edge w' two parallel incision near edge). |
| Nail | 1 | Horse shoe, unused, heavily corroded |

TRENCH 1, SQUARE 1
Unit 3.

| | | |
|---|---|---|
| Nails | 3 | Bullet head nails, 3" |
| | 1 | 3" (67.5 mm) wedge pointed: tapered head, rectangular shank extends to width of rectangular head. |
| Bone | 1 | Adult sheep cranium, distal rib, femora ball fragment |
| Bottle Glass | 1 | Clear body fragment |
| | 2 | Dark olive body fragment |
| Sheet glass | 3 | Clear; 3.0 & 2.1 mm thicknesses |

## Appendix 7: Excavated Artefact Collection. continued

TRENCH 1, SQUARES 3 & 4.Unit 1

| CLASS/TYPE | NO. | DESCRIPTION |
|---|---|---|
| Bone | 1 | Misc. sheep, 355 gm. |
| Nails | 1 | 1½" wedge pointed nail |
| | 1 | 1½" countersunk wood screw |
| | 1 | 4" rose-head wire drawn, type |
| | 3 | 3" rose-head wire drawn, type |
| | 1 | 2" rose-head wire drawn, type |
| | 5 | 2" bullet head, type |
| | 20 | 2" cut nails, type , from flooring. |
| | 3 | 2" galvanised roofing, w/ cupped washer head |
| | 5 | too corroded to describe. |
| Slate tile | 1 | large piece with two trimmed edges |
| | 8 | small pieces, less than 30 mm across each |
| Sheeting | 1 | Composition paving w/ wire mesh reinforcing. Painted blue. |
| | 1 | Cement fibre board. |
| Misc. metal | 1 | large iron staple |
| | 1 | fragment lead rod |
| | 1 | iron bracket, fragment |
| | | bobby pin. |
| | 1 | Copper ornament, two crescents soldered together back-to-back. |
| | 1 | pressed brass button, two holes. |
| Tableware | 1 frag. | White porcelain saucer edge, scalloped, grooved ring foot, no decoration |
| | 1 frag. | Clear glass bowl |
| | 1 frag. | Edge of dinner plate, pink band at edge, heavy high ring base. |
| | 1 frag. | Partial manufacture mark, white china plate |
| Bottle Glass | 1 frag. | Light green body fragment |
| | 1 frag. | Clear bottle base with logo "AGM" and "RegD. No." embossed |
| Misc. glass | 1 | old style game marble,; probably early 20th century |

TRENCH 2, SQUARE I, Unit 1

| | | |
|---|---|---|
| Bone | 1 | calcined mid-section long bone, no species ID possible |
| Nails | 3 | Rose-head, wire drawn, too corroded to ID. |
| | 1 | 2" lead/zinc roofing nail, Type 1, identical to ones used in house. |
| Slate tile | 20 | small pieces less than 25 cm across. |
| Bottle Glass | 2 | tiny fragments dark olive glass |
| Clear Sheet Glass | | numerous small pieces. 3.8 mm, 2.1 mm, 1.4 mm (double incised line at straight edge, solarised), 1.1 mm thicknesses. |

TRENCH 2, SQUARE 1,UNIT 2

| | | |
|---|---|---|
| Slate tile | 12 | all but one 2 cm across |
| Clear Sheet Glass | | numerous small pieces 2.0 mm, 1.2 mm, 1.0 mm thicknesses. |
| Brick | 1 | Hand-made brick fragment |
| Stone | 1 | Clear quartz crystal |

TRENCH 2, SQUARE 1,UNIT 3

| | | |
|---|---|---|
| Bone | 3 | Clavicle, cranium fragments sheep |
| Nails | 3 | 3" bullet head nail |
| | 1 | early 19th century rose-head brad fragment. |
| Sheeting | 1 | Cement fibro-board |
| Slate tile | 3 | Edge chipping 50 cm across |
| Clear Sheet Glass | 5 | 2.1 mm and 1.9 mm thicknesses |
| Curved Clear Glass | 2 | Thin (1.1 mm), probably lantern shade |
| Misc. Metal | 1 | Edge fragment, cast brass pot or bowl, 70 mm across. |

## Appendix 7: Excavated Artefact Collection. continued

TRENCH 2, SQUARE 1, UNIT 4-all discarded

| CLASS/TYPE | NO. | DESCRIPTION |
|---|---|---|
| Nails | 3 | 3" bullet head |
| Sheeting | 1 | small piece cement fibro-board |
| Slate tile | 1 | small piece |
| Clear Sheet Glass | | small number: 3.2 mm, 1.4 mm, 1.0 mm thicknesses, probably windows |

### TRENCH 2, SQUARE 1, UNIT 5

| | | |
|---|---|---|
| Nails | 2 | 3" wire drawn nails too corroded to ID |
| Tableware | 1 | Lip-base fragments, teacup, hand applied blue, w/ handle lug. |

### TRENCH 2, SQUARE 1, UNIT 6

| | | |
|---|---|---|
| Clear Glass Container | 1 | phial, cylindrical, 56 mm long, cork stopper missing. |

### TRENCH 2, SQUARE 1UNIT 7

| | | |
|---|---|---|
| Bone | 1 | Sheep femora mid-section |
| Nails | 1 | 1½" rose-head wire drawn (4.0 mm dia.) |
| | 1 | 1½" rhomboid head wire drawn nail |
| | 1 | 3" rose-head wire drawn brad, 78 mm long, 3.0 mm dia. |
| Slate tile | 1 | trimmed fragment, 250 mm long. |
| Clear Sheet Glass | | Several fragments. 2.4 mm, 2.0 mm, 1.4 mm thicknesses. |

### TRENCH 2, SQUARE 1, UNIT 8

No Artefacts

### TRENCH 2, SQUARE 1, UNIT 9

| | | |
|---|---|---|
| Tableware | 1 | small white china plate fragment, no decoration |
| Misc. Iron | 1 | rectangular tin, size of tobacco container. Too corroded to ID. |
| Bottle Glass | 1 | pale green bottle neck & rim, machine made, wide mouth condiment bottle. |
| | 1 | Blue thin glass, possibly a vase. |
| Clear Sheet Glass | 3 | small piece, 1.6 mm thick. |

### TRENCH 2, SQUARE 1, Unit 10

| | | |
|---|---|---|
| Misc. iron | 1 | Cast iron lug, shaped, possibly bed fitting. |

### TRENCH 3, SQUARE 1, *in situ* from below mortar pavement:

| | | |
|---|---|---|
| Bone | 1 | Cow vertebra, saw cuts present |
| | 1 | Cow rib frag. |
| | 3 | Rabbit vertebra, ribs. |
| Plastics | 1 | ¼" hose |
| | 1 | bottle seal, drink container |
| | 3 | drink bottle |
| | 1 | nylon sock |
| Sheeting | 1 | small fragment, masonite painted green |
| | 1 | small piece cement fibro-board |
| | 1 | Composition paving, painted blue. |
| Slate tile | 3 | One large two small fragments, larger with two trimmed edges |
| Nails | 3 | 2" galvanised roofing with lead washer head, green paint, N5.3 |
| | 1 | 2" galvanised roofing, washer head missing. |
| | 1 | 3" drawn wire crude rose-head nail. Two opposing spurs only, square shank at head is 4.6 mm across. |
| | 1 | 2" drawn wire rose-head, irregular high profile offset ; two opposing spurs only, square shank at head, two sided point. |
| | 1 | 2" lead/tin/zinc roofing nail, headless. |
| | 1 | headless cut nail,. |
| | 1 | ¾" square shank tack, oval head. |
| | 4 | 3" bullet-head nails |
| | 1 | 1½" galvanised cladding nail, modern |
| | 6 | 2" rose-head nails, type___. |
| Bottle Glass | 1 | lip fragment, clear wide-mouth bottle with screw top. |
| | 1 | amber beer bottle, post-mid 20th century. |

## Appendix 7: Excavated Artefact Collection. continued

| | | |
|---|---|---|
| | 1 | clear whisky bottle fragment, 20th century |
| Misc. Metal | 1 | small padlock, "Lockwood made in Australia" |
| Brick | 1 | small fragment hand-made brick |

**TRENCH 3**

*in situ* below stone pavement

| | | |
|---|---|---|
| Bone | 1 | Sheep pelvis and molar |
| Fish | 1 | Scale |
| Nails | 2 | 2" galvanised roofing nail with cupped washer |
| | 1 | 2" bullet head nail |
| | 19 | iron nails too corroded to ID |
| Bottle Glass | 1 | Thin clear glass fragment, probably lantern shade |
| | 1 | Light green glass |
| | 1 | Clear drink bottle fragment, w/ mould mark from neck to base |
| Plastic | 1 | black insulation for electrical wire. |
| Gun cartridge | 1 | Brass, 22 calibre rifle, rim fire. |
| Misc. iron | 1 | 3/8" diameter rod fragment. |
| Chinaware | 1 | White tea cup, mostly whole. No decoration or manufacture marks. |
| | 1 | White plate fragment with red stripe around edge. |

**TRENCH 3&4** Unit 1

| | | |
|---|---|---|
| Chinaware | 2 | Porcelain, side plates, no manufacturers marks, all white-discarded |
| Glass | 1 | Bowl w/ teardrop motif, moulded, fragment--discarded |
| | 1 | marble |

**TRENCH 5: sub-floor, Central Room, from brushing**

| | | |
|---|---|---|
| Ceiling Plaster + render: | 1 | with pink and blue lime wash. See box containing several samples of each. |
| Bottle Glass | 1 | Amber beer bottle, probably 750 ml. Yellow and blue painted label with words "4.9% ALC/vol." "United Breweries Limited". Embossed on base are words "Bottle always remains property - - - manufacturers Pty. Ltd." |
| Sheet Glass | 1 | Clear window pane glass, 2.8 mm thick, 2.0 mm thick, tiny fragments of 4.2 mm thick. |
| | 1 | Light green tinted, 1.6 mm thick |
| Brick | 1 | Refractory brick fragment: coarse grained sand |
| Nails | 1 | Bullet head collected *in situ* from floor board timber fragment. |
| | many | 2" bullet-head collected loose. Identical to one above. |
| | 23 | Wrought iron, round-headed lath nails, as N1.2, collected loose. |
| | 8 | Slate tile roofing nails, all used, Type N1.9 |
| | 4 | 2" wedge point nails, rose-head, 1 unused |
| | 1 | cut nail, incomplete shank |
| | 1 | rose-head brad |
| | 67 | 2" bullet head nails |
| | 2 | 2" galvanised roofing nails with cupped washers, painted red. Colour indicates these nails are from original CI roof. |
| | 1 | 1¼ bullet-head nail. |
| Plastic | 1 | red electrical wire with insulation |
| | 1 | child's tooth brush with kangaroo on handle |
| Misc. Metal | 1 | Aluminium fixing strap for electrical power cable. |
| | 1 | Iron crampon crown seal for beer bottle |
| | 1 | 45 x 25 mm sheet of tin. No markings, probably flashing piece. |
| Wall Paper | 1 | Stylised leaves in yellow and brown against bkgrd. of cream. Same as on wall now. |
| | 1 | Solid orange colour, no other pattern |

## Appendix 7: Excavated Artefact Collection. continued

### TRENCH 5 UNIT 1: EXCAVATION

| | | |
|---|---|---|
| Slate | 5 | Small fragments |
| Plaster | 1 | Ceiling plaster and associated render with blue wash. |
| Nails | 1 | 2" bullet-head nail |
| Button | 1 | Brass pressed button, four holes, 14.0 mm diameter |
| Stone | 2 | Silcrete Aboriginal flakes, 13.5 mm and 19.0 mm long. |

### TRENCH 5 UNIT 2: EXCAVATION

| | | |
|---|---|---|
| Plaster | 1 | Ceiling plaster with lath marks reverse side, finely tooled and smooth. Pink wash present as first decorative coat over plaster. |
| | 1 | Ceiling plaster with pink wash and embedded animal hair. |
| | 1 | As plaster above, with blue wash over pink. |
| Sheet Glass | 4 | Small clear fragments, 3.1 mm, 1.75 mm, 1.6 mm, 1.2 mm thick |
| Bottle Glass | 1 | Amber beer bottle fragment with mould seam. 20th century. |
| Buttons | 1 | white opaque glass, irregular finish. 11.0 x 3.4 mm, 4 holes. |
| | 1 | Bone, 2 holes. 10.6 mm diameter |
| Slate | 4 | Small roofing tile fragments. |
| | 1 | Ground rod with point, like a pencil 3.0 mm diam. 40.5 mm long. |
| Mortar | 1 | Block of hard mortar associated with brick in-fill created when floor was raised in 1950s. |
| Coin | 1 | Australian half penny, 1945. |
| Nails | 1 | 4" bullet-head nail. Shank diameter = 4.5 mm |
| | 5 | 1¼" bullet-head nails. Shank diameter = 2.2 mm |
| | 1 | 3" bullet-head nail. Shank diameter = 3.8 mm |
| | 2 | 2½" bullet-head nails. Shank diameter = 3.1 mm |
| | 1 | 2" bullet-head nail. Shank diameter = 3.1 mm |
| | | wedge nails |
| | | lath nails, **N1.3** |
| Wall Paper | 1 | Fragments w/o discernible pattern with pink cement wash attached to back. |
| Timber | 1 | Hard wood off-cut with pit saw marks and white paint attached, possibly was either trim around door frame or floor plank. 1 x 4" |
| Misc. Iron | 1 | Iron "T" bracket with one arm missing. Hand forged with square holes punched at each end. Possibly masonry hardware? |

### TRENCH 5, UNIT 3, EXCAVATION

| | | |
|---|---|---|
| Button | 1 | Bone, 4 holes. 18.8 mm diameter |
| Aboriginal artefacts | 1 | Geometric microlith, chert. |
| | 3 | Chert and quartz reduction flakes, no retouch. |
| Plaster | 1 | Ceiling plaster without traces of surface colouring. |

### SUB-FLOOR, TRENCH 5, IN DOORWAY

| | | |
|---|---|---|
| Plaster and render | | Collection contains numerous samples taken from loose rubble in doorway, some with surface decoration. The "hard" mortar from the post-1950s renovation of the step at the door is a part of a sample of "conglomerate. |
| Timber | 1 | Pit sawn off cut with paper adhering. 4 x 4 x 1". |
| | 1 | Shaving, long curl left from jack plane by carpenter during hanging of door. Because this was attached to hard mortar used in renovating brick step, this door precedes in time the one hung in 1950s. |
| Nails | 1 | 4" bullet-head nail |
| | 1 | 3" bullet-head nail |
| | 6 | 2" bullet-head nail |
| | 39 | 1¼" bullet-head brads |
| | 1 | 2" cut nail too corroded to describe in detail. |
| | 1 | 2" wedge pointed nail, too corroded to describe in detail |
| | 1 | 1" lath nail, **N1.3**. |
| | 1 | 1¼" galvanised cladding nail. |

| | | |
|---|---|---|
| Sheet Glass | | Clear fragments, 1.0 mm, 1.6 mm, 3.0 mm thick. |
| Game marble | 1 | two colours, smooth regular curvature. 20th century |

FROM BASE OF STONE WATER STAND

| | | |
|---|---|---|
| Chinaware | 1 | Plate fragment with blue willow ware pattern. |
| | 1 | Platter fragment with blue transfer pattern. |
| | 1 | Water jug neck fragments, blue flow |
| | 1 | Porcelain cup fragment, white, with "Japan" in blue |
| | 1 | Plate edge fragment, with bright blue stripes, identical to type 3 chinaware at National Hotel with date of 1850s (Luebbers 1994). No ID marks. |
| | 1 | ?lid fragment with blue floral transfer pattern. |
| Bottle Glass | 1 | Amber beer bottle, 375 ml. 20th century. |
| Coin | 1 | Australian one cent, 1952 |
| Bone | many | Rabbit bones |
| Nails | 7 | 2" corrugated Iron roofing nails, type **N4.3** |
| -- | 3 | 2-3" wire drawn nail, too corroded to identify |
| Plastic | 1 | electrical wire insulation |
| -- | 1 | toy train part |

SUB-FLOOR, SOUTH ROOM

| | | |
|---|---|---|
| Wall Paper | 1 | Faded pattern consisting of band of solid pink floral heads alternating with bands of silver/white floral motives and narrow parallel strips. This paper overlies a much darker pattern which cannot be described until it has been removed. |
| | | |
| | | |
| | | |

FILL BENEATH EAST VERANDAH ABOVE CONCRETE FLOOR

| | | |
|---|---|---|
| Table spoon | 1 | Nickel/silver plated, Sheffield England |
| Coin | 1 | Silver three pence, Australian, 1950 |
| Coin | 1 | Copper, Australian Penny, 1942 |
| Buttons | 2 | Woman's dress, both plastic |

NOTES ON MATERIALS:

Composition Board:

Made from magnesium oxide and cement, this product became available in the Australian market in c 1906. At Pontville this board was laid in both the internal and the detached kitchen in the form of grouting, and in the case of the former, slates were fixed to a rubberised layer over the composition board. A wire mesh was used (a.k.a. chicken wire) in the kitchen at the base of this pavement, the wire attached to the floor boards by galvanised flat head cladding nails. This preparation probably promoted bonding to the timber sub-floor and reduced cracking. The wire mesh was not used in the preparation of the internal kitchen floor.

Cement fibro-board:

This material was installed on the southern face of the kitchen after 1950 and facilitated two door openings, one into the kitchen, the other the bath room. Installation appears to have been required to replace decayed weatherboard and is likely to have coincided with the pouring of the composition board across the floorboards. A rust stain seen on a photograph (Irvine Green) running down the board of the south-eastern corner indicates that a water tank functioned during this time period, it being located on the stone rubble base that is there today. Stains down this board still attached to the timber frame indicates leaking gutters after its installation.

Bone:

Almost all food bone is prepared from either butchered sheep or cow. It is always well preserved and there is no instance of calcination or charring. Bones from both animals exhibit sharp saw cuts from the butchering process to obtain standard roasts and chops. In general, these cuts do

not include large portions of the leg (particularly cow) or other bones where high meat to bone ratios are high, suggesting that a large number of diners was not present at any one meal.

Rabbit bone is common throughout the sub-floor area of the kitchen and house, their burrows signifying repeated infestation in the recent past. These remains are rarely fragmented and sometimes consist of articulated elements, such as limbs, vertebrae or posterior torso. There was no evidence to suggest that rabbit is present in the site other than as live animals. Individual bones of dog are present from around the kitchen, only in low numbers.

Sheet Glass:

Sheet glass in this collection is invariably clear and rarely exhibits bubbles, streaks, or other manufacturing imperfections. Several thicknesses are present, presumably the thinner ones being used in picture frames, furniture, or in small panes which do not require heavier glass elements. In this collection, glass 2.4 mm or thicker probably implies sash window panes of 20th century manufacture. The thinner glass is likely to be from smaller window panes as can be demonstrated in other 19th century windows. A straight edge rarely occurs in the fragments, but where it does, traces of glazing is often present. A pair of incised lines has been etched parallel to the straight edge as a form of decoration in several fragments. The one certain example of a curved edge exhibits the glazier's cut marks. Only glass 2.0 mm or less in thickness is solarised.

Bottle Glass:

Bottle glass can be divided into functional categories and manufacturing processes to make statements of economic and social behaviour of residents and visitors. The dark olive bottle glass is generally accepted as tapering off in the market place in Australia in the 1870s and was rare in the 1890s except in name brand and novelty production lines. Clear bottle glass obviously also enjoyed a similar popularity in both the spirit and to a lesser extent wine industry throughout the 19th century. Clear bottle glass was especially common for condiments, sauces, preserves, etc.

The amount of bottle glass is relatively slim in the collection as a whole however, which hampers an interpretation of its function in the house hold. Given the likely dominance of male occupants at the farm, the absence of drink bottles is unexpected, even when the sampling is confined so close to the dwellings. At this time, very little about the age or activity of the household can be made from bottle glass, except to say that the great preponderance of glass containers recovered by this project clearly were made in the 20th century.

Some glass found in the vicinity of the South-east corner of the house is the only significant exception to the pattern of 20th century glass manufacture. In this area, dark olive glass from case gin bottles with estimated dates of manufacturing from the period 1840-1880 was common amongst much 20th century bottle glass. A majority of these were body fragments and in no instance was a base or lip fragment found which might shed more definitive evidence about the identity of the manufacturer or precise time of manufacture.

Chinaware:

China in any form or size is rare in the Pontville collection and therefore no descriptions are provided. The only exception are three bowl fragments from a single white coffee cup w/o markings.

## Appendix 8, Culla Hill Artefact Catalogue

This small collection contains individual artefacts from the Culla Hill homestead obtained in June 1997 lying either loose or from *in situ* where they were not in a functional role due to renovation. Number of specimen in parenthesis.

| ID No | Description | Measurements |
|---|---|---|
| CH-1 | Ewbank nail (1), *in situ* from short rafter to main rafter. Type 1 | L =63.6 W = 5.0 mm |
| CH-2 | Cut sheet nail (1), *in situ* from loft timber floor, Type 1 | L =48.5 mm, W =4.2 mm |
| CH-3 | Ewbank nail (1), *in situ* from flooring over rear verandah, Type 1 | L =45.2 mm W= 3.2 |
| CH-4 | Ewbank nail (1), *in situ* from short rafter, Type 1 | L = 50.0 mm, 4.5 mm |
| CH-5 | Ewbank nails (2), *in situ* from main loft floor, both bent, Type 1 | L = 48.0 mm, 4.5 mm |
| CH-6a | Ewbank nail (1); ejection marks on neck, no star trademark; *in situ*, floor over kitchen, Type 1 | L = 43.5 mm, w = 3.3 mm |
| CH-6b | Ewbank nail (1); ejection marks on neck, no star trademark; *in situ*, floor over kitchen. Type 1 | L= 45.2 mm, w = 3.2 mm |
| CH-7 | Ewbank nail, *in situ*, from pit sawn rafter, June 1997, Type 1 | L= 53.2m W =4.0 mm |
| CH-8 | Timber, softwood, probably pine batten, collected loose from loft, with type N2 Ewbank fixing nail and Type N4 roofing clout embedded. | 20 x 30 mm x-section, 190 mm long |
| CH-9 | Timber, softwood, probably pine batten, collected loose from loft, with two Ewbank nails in fixing position and two Type 1 zinc alloy roofing clouts embedded. | 20 x40 mm x-section |
| CH-10 | Timber, softwood, probably pine batten, collected loose from loft, with one type Ewbank nails in fixing position and one Type 1 roofing clout embedded. | 20 x 35 mm x-section |
| CH-11 | Mortar, from brickwork in core room | |
| CH-12 | Mortar from core room wall | |
| CH-13 | Render from Culla Hill barn or long house? | |
| CH-14 | Render *in situ* from verandah wall above roof line, note tooled external layer | |
| CH-15 | Split length of lath, probably hardwood. Loose from loft. | |
| CH-16 | Hardwood laths used as spacers, with Type 1 lath tacks. Found loose in loft around north chimney–believed remnants of renovation of timber surround to chimney. Note both cut to 900 mm lengths. Remnant tacks *in situ*–must be treated with care to ensure these remain intact. | |

CH = Culla Hill

# APPENDIX 9

## Post-1950 Mass renovation

The most significant 20th century renovation to Pontville took place following the purchase of the property in 1950 by Leslie Eric Paddles. While minor changes may have subsequently occurred, collectively they involved enclosure of the homestead with a new external brick wall, installation of interior bathroom/laundry and fully functioning kitchen, and electricity. A description of these changes and a brief summary of the evidence supporting them is presented as follows:-

- New single leaf brick (Glen Iris) wall installed inside line of old wall and along the front and rear verandah to enclose the house under existing roof. Evidence for this is notch points in rafters, Glen Iris bricks visible beneath render of walls, pre-renovation accounts.
- All original outside walls of end rooms demolished leaving behind the original stone footing at ground level and the need to renovate corners of core rooms.
- New walls rendered and concrete floors installed in enclosed verandah.
- Original interior plaster removed and replaced by modern cement-rich render, electricity installed for first time (electric poles installed 1954). Documentation in support of date consists of dated application form to Electricity Trust (Context 1995). The absence of patchwork or repair to wall render either at the top of the wall or around conduit channels in wall indicate that electrical wiring and render are exact contemporaries.
- Caneite ceilings installed over timber lining in three main rooms and painted white. The timber lining is a replacement ceiling for lath and plaster as is discussed in this report.
- Fireplace in south room demolished; opening remains in floor, timber trim remains in roof.CI sheets covered chimney opening.
- Skylight installed in central room. Photographs showing light in former roof.
- New timber floor boards installed throughout core rooms in house. Evidence for this is age of fixing nails, age of brick renovations to door openings, and timber elements. This floor may not have been a replacement of the original as discussed elsewhere.
- Interior kitchen and bathroom/laundry installed in east verandah over raised timber floor, giving house its first inside plumbing. Bathtub, and plumbing fixtures are post war manufacture.
- Shower stall installed in detached kitchen.
- Septic system installed, toilet installed between cypress tree and detached kitchen near house.
- Window changed to door between south room and east verandah for easy access to new kitchen. Evidence from direct fabric analysis showing renovation to opening, analysis of historical photographs, and pre-renovation account.
- Louvered glass windows installed in some external walls.
- Water storage system installed, including pump house at Yarra River and two high tanks at house. Stone base for water tank at detached kitchen built, probably replacing an earlier timber one. Water tank at SE corner of house removed. Dated photographs from Irvine Green, archaeological evidence discussed in Chapter 4, historical photographs, testimony of pre-renovation eye-witnesses.
- Terracing of front garden; wall built from detached kitchen to first terrace embankment on north side of house. Unanimous testimony of pre-renovation account, changed surface elevations discussed here.

## APPENDIX 10 Wall paper assessment by Phyllis Murphy August 1997

Dear Roger,
Peter Cuffley has passed on to me the wallpaper fragments from Culla Hill and Pontville. I was most interested to see them and he suggested that you would be interested in my comments, modest though they are.

It is interesting that both samples show a colour wash underneath. I have often come across this in mid-nineteenth century samples. I sometimes wonder if it was to allow the plaster to dry out before hanging wallpaper, or perhaps while waiting for the supply of paper. Blue is the most common colour I have seen, but I have also come across pink.

The primitive pink stripe from Pontville would I presume, have been hung in a bedroom or nursery. It has the mid-nineteenth century characteristic of alternating patterns in the stripes- the pink, all-over abstract design based on a floral motif and the contrasting silver pattern, all on a white ground. It would have been very elegant and delicate when first hung.

The smaller fragments from Culla Hill are more difficult. However, the first characteristics I noted were the bright pastel colours (even though so tiny)). These colours are very typical of mid-nineteenth century. It seemed possible to produce them using vegetable dyes and the natural fibre paper does not cause deterioration in the same way as later, acidic paper. The photographs show some sort of lozenge shaped abstract motif in strong colour and arranged in a diaper pattern. Again, this is very typical of mid-nineteenth century.

Thank you for sending the samples on to me. I am always interested to look at any samples and, if possible, to date them.

Yours sincerely

Phyllis Murphy, signed

22 August 1997

Elimatta
62 Edgecombe Street
Kyneton, 3444, Victoria

2.9.97

Additional notes following our telephone conversation:

SAMPLE 11: Orange paper. The texture and plain colour seem more typical of 20th century than 19th. Plain coloured papers were sometimes used in conjunction with gilded or patterned borders of narrow width. However, the colour does not seem typical of 19th century and would suggest a much more recent date.

SAMPLE 22: I did not try to separate these papers in case the plaster fell to pieces and the whole sample ruined. The earliest layer, after the blue wash, appears to be an all-over floral and leaf pattern-typical of early and mid-nineteenth century. (for information I have enclosed a photo-copy of a similar type of striped paper from the V & A Museum *)

I suggest that both layers are early but I am doubtful that they were used on a ceiling. Ceiling papers always have a geometric base to the design and are non-directional. A vertical stripe or an all-over floral design would not normally be used on a ceiling.

SAMPE 23: I assume this paper was a lining paper over the pink wash. Although not common, I have come across lining papers under patterned design.

SAMPLE 24:Your assumption of ca 1951 seems very reasonable given the character of the design and colours.

SAMPLE 25: It appears that lining papers were used in more than one area of the house, indicating a high standard of painting and decorating. The patterned paper appears to have been grounded in colour, but the colour has leached out. It could be mid-19th century but there is hardly enough pattern to be certain.

SAMPLE 26: Once again, it appears to be lining paper.

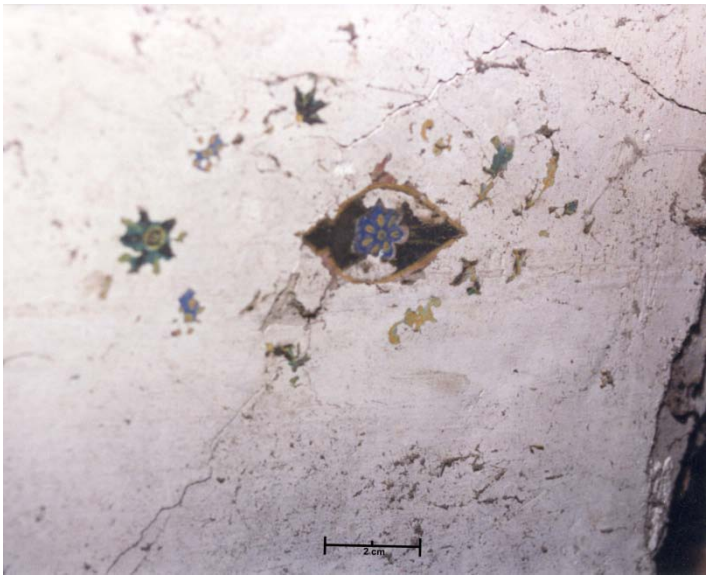
I hope these comments are helpful

Kind regards,

Phyllis Murphy

*Charles C Oman and Jean Hamilton, 1982, *Wallpapers A History and Illustrated Catalogue of the Collection in the Victoria and Albert Museum, Sotheby London, p 153.*

[Hand written letter from Phyllis Murphy]




*This photograph of Culla Hill wall paper fragments adhering to plaster wall in side loft was assessed by Murphy.*

***Sample 22** from Pontville assessed by Murphy containing a pattern featuring a floral motif with series of white lines and geometric figures (**S22a**) beneath paper with pink floral bubs lining contrasting bud pattern in linear panels (**S22b**), over-lying blue lime wash. From sub-floor context, south room.*

***Sample 25** from Pontville assessed by Murphy, from subfloor context.*


***Samples 24*** *from Pontville assessed by Murphy. Clockwise, top left to right, a) found adhering to wall, b) orange paper located on east verandah core wall, c), from sub-floor cavity, north room. Latter paper was obtained from ceiling plaster found loose in sub-floor cavity, either central or south room.*